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ABusek Esg Whalsinghams Complements

ON THE

MICRO-LEPIDOPTERA

OF THE

WEST INDIES.

BY

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(Plate XLI.)

This paper is founded upon a collection of Micro-Lepidoptera made by Herbert H. Smith in the Island of St. Vincent, and placed in my hands by Mr. F. DuCane Godman. In order to identify the species it was necessary to study carefully all the descriptions of West-Indian forms which might probably be found among them. It is possible that some may yet have been overlooked, as they are scattered through a mass of periodical publications in at least three languages. Having so far made myself acquainted with the literature of the subject, it seemed desirable to supply such information as would facilitate a study of the geographical distribution, and with this view a tabulated index to all the West-Indian species is included in the paper. It has not been attempted to define or to follow any already defined faunistic West-Indian region; the term is used simply in its geographical sense, and includes the whole range of islands stretching from Yucatan to the coast of Venezuela. It would be interesting in this connection to obtain a representative collection from the peninsula of Florida and the adjacent islands, approaching, as they do, so nearly to the northern coast of Cuba, especially as the few species I have seen from that locality are remarkable, not only for their beauty and distinctness, but also for their evident alliance with the genera, and almost with the species, which have reached us from the mouth of the Amazons and from the northern portion of Brazil. It will be seen that, so far as our present knowledge extends, the Micro-Lepidoptera of these islands are somewhat highly specialized. Several new genera are described and others are mentioned which have not as yet been recognized elsewhere; but it must not be presumed that these will not ultimately be found to have a wider distribution. Had we been dealing with the Rhopalocera, or with any of the larger and more conspicuous Heterocera, a tabulated Index would have shown more nearly the true limitation of range in the different species; for these have been carefully collected and studied, and individual species are far less likely to have been overlooked than those of obscure and much neglected groups such as the Tortricidæ, Tineidæ, and Pterophoridæ. With the exception of three more or less cosmopolitan species, one of which, Trichoptilus centetes, Meyrick, seems out of place here (probably only because it has been described under other names from different parts of the world), the whole of the known West-Indian forms are decidedly American, ranging northward to the Southern and Western portions of the United States, and southward as far at least as Brazil; the majority, however, certainly belong to the truly Central-American fauna. I must acknowledge my indebtedness to Dr. Staudinger for allowing me to see several of

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Zeller's types, and to my friend Mr. Godman for placing this limited, but interesting and valuable collection in my hands. Mr. Druce has also kindly contributed several species from Dominica, and Mr. J. H. Hart has also been good enough to collect for me in Trinidad, and Mr. T. D. A. Cockerell in Jamaica.

PTEROPHORIDÆ.

AGDISTINE.

SCOPTONOMA, Z.

SCOPTONOMA TIPULOIDES, sp. n.

Antennæ pale cinereous.

Palpi whitish ochreous, streaked along the sides with black.

Head brownish above, with a dark brown triangle in front margined with whitish-ochreous lines passing from the base of the antennæ and meeting above the haustellum.

Thorax mottled with reddish brown, dark fuscous, and whitish ochreous.

Fore wings brownish, with numerous angulated whitish streaks, intermixed with dark fuscous streaks, lines, and shading; an oblique whitish line from the dorsal margin near the base terminates on the median vein at almost one third of the winglength, this is preceded and followed by a few blackish scales, and the space within it has a somewhat longitudinally-striated appearance: from near the middle of the dorsal margin arises a second whitish oblique streak, angulated backwards about the middle of the wing, and thence again outwards along the median vein; throughout its length it is accompanied on its upper side by a narrow black line which is continued beyond it, first towards the anal angle and thence, after several deflexions, upwards to the apex and costal margin; this oblique double line forms the lower edge of two, almost connected, angular transparent rosy-white patches, the first extending from the submedian to the median vein, the second lying above the median, decidedly triangular, its base upon the lower edge of the cell, its apex reaching to the upper edge beyond the middle of the wing; the inner margins of these triangular patches being continuous, give them the appearance of one single oblique patch, but the ground-colour of the wing is carried through them very narrowly along the median vein; a dark fuscous or blackish shade clearly defines the inner and outer margins of the transparent patch, but the space below it is more tinged with brown than the apical portion of the wing beyond it, except along the costal and part of the apical margin: at two thirds from the base is a short semi-transparent streak dark-margined within, a little beyond which is a pale costal spot dark-margined on both sides: beyond this small costal spot we come to the other end of the black line (already described as arising from the dorsal margin before the middle in connexion with the pale streak below it); tracing it therefore, in the opposite direction, we find it arising at about one-sixth from the apex, running very obliquely

outwards nearly to the depressed apex itself, thence back at a very acute angle to a point opposite its origin, whence it is curved downwards and outwards towards the middle of the apical margin, with which it runs parallel until again curved above the anal angle, whence it can be traced to the triangular semi-transparent patch (up to which its course has already been described); the black line is margined on both sides with whitish-ochreous lines above the middle of the apical margin, and a short line of the same colour extends along the upper half of the margin to the apex, there is also a short streak above the anal angle; cilia whitish, with much dark fuscous mottling, especially at the apex, at the middle, and at the anal angle, but with a dark line running throughout them near the base. The markings to a great extent show through on the underside.

Hind wings semi-transparent, pale rosy æneous; the apex and outer half of the dorsal margin banded with blackish, as is also the costal margin; with three blackish spots, one below the middle of the costal band, one below the middle of the wing, and one at the abdominal angle (these are inconspicuous in specimens in less good condition); a slender whitish line runs parallel with the dorsal margin throughout the wing-length; cilia pale cinereous, with a dark line running through their middle. The markings to a great extent

show through on the underside.

Abdomen whitish ochreous, mottled above with reddish brown mixed with dark fuscous; some slight lateral tufts along the segments are also of this mixed colour.

Legs pale whitish ochreous, unspotted.

Exp. al. 24 millim.

Hab. West Indies—Trinidad. (Port of Spain; 1 specimen received from Mr. J. H. Hart.)

Type, of Mus. Wlsm.

I have also two specimens of this species from the Zeller Collection collected either by Baron von Nolcken or Petersen; but I have not been able to trace whether they were taken in the West Indies, Panama, or Colombia.

Pterophorinæ.

TRICHOPTILUS, WISM.

TRICHOPTILUS CENTETES, Meyr.

Trichoptilus centetes, Meyr. Tr. Ent. Soc. Lond. 1886, pp. 16, 17: 1887, p. 266.

[?=Pterophorus oxydactylus, Wkr. Cat. Lp. Ins. B. M. xxx. p. 944 (1864), Ceylon.]

New Guinea, Australia, (? Ceylon).

West Indies—St. Vincent (windward side, 3 specimens, Smith).

This species has apparently a wide distribution, and is very nearly allied to *Trichoptilus* (*Aciptilus*) californicus, Wlsm., from Northern California; it has, however, darker hind wings and less white upon the surface and cilia of the fore wings. Specimens from Mexico and

Arizona cannot be separated from T. centetes; but from their slightly paler colouring may perhaps be regarded as forming a connecting link between the Northern and Southern forms.

PLATYPTILIA, Hb.

PLATYPTILIA PUSILLIDACTYLA, WKr.

Oxyptilus pusillidactylus, Wkr. Cat. Lp. Ins. B. M. xxx. p. 933 (1864).

N. syn.=Platyptilia tecnidion, Z. Hor. Soc. Ent. Ross. xiii. pp. 468-9, pl. vi. fig. 162 (1877).

Imago. February (Z.).

West Indies—Jamaica (Wkr.), St. Thomas (Z.).

PLATYPTILIA, sp., Snell.

Platyptilia, sp., Snell. Tijd. v. Ent. xxx. p. 66 (1887).

West Indies—Curação (Snell.).

STENOPTILIA, Hb.

STENOPTILIA? PUMILIO, Z.

Mimeseoptilus pumilio, Z. Ver. z.-b. Ges. Wien, xxiii. p. 324 (1873).

United States.—Texas (Z.).

West Indies—St. Vincent (windward side, 2 specimens, Smith).

The slender erect palpi as well as the neuration appear to separate this species from *Mimeseoptilus*, Wlgrn. (=Stenoptilia, Hb.), the genus in which it was placed by Zeller. The same form occurs in other species from South America; but I prefer to study more material before coming to a decision upon its generic value.

ALUCITA, L.

ALUCITA THOMÆ, Z.

Leioptilus thomæ, Z. Hor. Soc. Ent. Ross. xiii. pp. 480-1, pl. vi fig. 170 (1877).

Imago. December (Z_{\cdot}) .

West Indies—St. Thomas (Z.).

ALUCITA BASALIS, Mschl.

Oedematophorus basalis, Mschl. Ab. Senck. Nat. Ges. xv. pp. 345-6, 354 (1890).

West Indies-Portorico (Mschl.).

ALUCITA PALEACEUS, Z.

Leioptilus paleaceus, Z. Ver. z.-b. Wien, xxiii. pp. 326-7 (1873).

Pterophorus paleaceus, Mschl. Ab. Senck Nat. Ger xv. pp. 346, 354 (1890).

United States.—Ohio (Z.), Texas (Z.).

West Indies—Portorico (Mschl.).

Proc. Zool. Soc.—1891, No. XXXIV.

ALUCITA BIPUNCTATUS, Mschl.

Pterophorus bipunctatus, Mschl. Ab. Senck. Nat. Ges. xv. pp. 346, 354 (1890).

West Indies — Portorico (Mschl.).

ALUCITA PARTICIPATUS, Mschl.

Pterophorus participatus, Mschl. Ab. Senck. Nat. Ges. xv. pp. 346, 354 (1890).

West Indies—Portorico (Mschl.).

ALUCITA PRÆUSTUS, Mschl.

Pterophorus praeustus, Mschl. Ab. Senck. Nat. Ges. xv. pp. 346, 354 (1890).

West Indies—Portorico (Mschl.).

PTEROPHORUS, Geoffr.

PTEROPHORUS AGRAPHODACTYLUS, Wkr.

Pterophorus agraphodactylus, Wkr. Cat. Lp. Ins. B. M. xxx. p. 941 (1864).

West Indies—San Domingo (Wkr.).

PTEROPHORUS ASPILODACTYLUS, Wkr.

Pterophorus aspilodacty/us, Wkr. Cat. Lp. Ins. B. M. xxx. pp. 941-42 (1864); Btl. P. Z. S. 1878, p. 495.

West Indies—Jamaica (Wkr.).

Pterophorus, sp., Mschl.

Aciptilia, sp., Mschl. Ab. Senck. Nat. Ges. xv. p. 346 (1890). West Indies—Portorico (Mschl.).

Orneodinæ.

ORNEODES, Latr.

Orneodes eudactyla, F. & R.

Alucita eudactyla, F. & R. Reise Nov., Lp. pl. cxl. fig. 62 (1875); Mschl. Ab. Senck. Nat. Ges. xv. pp. 346, 354 (1890).

Colombia, Brazil.

West Indies-Portorico (Mschl.).

TORTRICIDÆ.

Tortricinæ.

Apinoglossa, Mschl. & Saalm.

APINOGLOSSA COMBURANA, Mschl.

Apinoglossa comburana, Mschl. Ab. Senck. Nat. Ges. xv. pp. 331, 354 (1890).

West Indies—Portorico (Mschl.).

CACŒCIA, Hb.

CACŒCIA JAMAICANA, Wkr.

Teras jamaicana, Wkr. Cat. Lp. Ins. B. M. xxviii. p. 291 (1863).

West Indies—Jamaica (Wkr.).

This species was wrongly included in *Teras* by Walker; it should be transferred to *Cacœcia*, with which it agrees in structure.

TORTRIX, L.

TORTRIX? EFFOETANA, Mschl.

Tortrix effoetana, Mschl. Ab. Senck. Nat. Ges. xv. pp. 330, 354 (1890).

West Indies—Portorico (Mschl.).

TORTRIX? INSIGNITANA, Mschl.

Tortrix insignitana, Mschl. Ab. Senck. Nat. Ges. xv. pp. 330-31, 354 (1890).

West Indies—Portorico (Mschl.).

These two species being described from females, it is impossible to say whether they are rightly referred to the genus *Tortrix*.

PTYCHAMORBIA, gen. n.

 $(\pi\tau \dot{\nu}\xi = a \text{ fold}; Amorbia, nom. gen.)$

Type, $3 \subsetneq Tortrix exustana$, Z. (Colombia). (Plate XLI. fig. 1, a-f.)

(exustana, Z., Q = colubrana, Z., d.)

Antennæ biciliate in the \Im , each ciliation formed of a group of several hairs, and with the first 14 and the basal joint thickened with a mat of scales above, somewhat lengthened at its abrupt termination; \Im simple.

Palpi conical, densely clothed, apical joint moderate; projecting more than the length of the head beyond it in the 3, twice the

length of the head in the Q.

Head moderately smooth; frontal scales projecting over the base of the palpi.

Thorax smooth.

Fore wings elongate, quadrate; costal margin arched before the middle, 3 with a strong costal fold at the base; apex rectangular, apical margin slightly indented below the apex; dorsal margin slightly convex. Neuration: \$\Pi\$ 12 veins; 7 and 8 with a long common stem, enclosing the apex: 3 11 veins (7 and 8 coincident).

Hind wings with the costal margin excavate before the apex in both sexes; apex rounded; apical and dorsal margins almost continuous, abdominal angle slightly dilated; \mathcal{P} with long hairs above at the base. Neuration: 8 veins; 3 and 4 from a point, 5 bent over to near base of 4.

Legs moderately clothed.

This genus partakes of the characters of Amorbia, Clem., and Platynota, Clem., resembling the first in the different neuration of the male and female, and the latter in the presence of a costal fold in the male. It is also allied to Cerorrhineta, Z., which agrees with Platynota in neuration, but differs in the structure of the antennæ and in the shape of the fold.

Zeller's type of Tortrix (Enectra) exustana (Q) is before me, and it is unquestionably the female of Tortrix colubrana, Z., of which the type (3) is also in my collection. Both specimens are from Colombia. The differences in the neuration apparently misled Zeller in supposing them to be distinct, and caused him to refer them to

different genera.

PTYCHAMORBIA CATENANA, Sp. n.

Antennæ (?) with the basal joint somewhat enlarged, simple; dark reddish brown.

Palpi projecting more than the length of the head beyond it; second joint smooth, somewhat thickly clothed above; apical joint moderate, exposed; reddish brown.

Head and thorax reddish brown.

Fore wings (2) much arched at the base, straight beyond, apex somewhat produced; apical margin indented, not oblique; anal angle rounded. Neuration: 12 veins, 7 and 8 from a long common stem, enclosing the apex. Tawny reddish-brown with a very ill-defined basal patch, wider on the dorsal than on the costal margin; an illdefined fasciaform shade commencing at one third from the base on the costal margin runs obliquely outwards to the middle of the wing, thence depressed to the dorsal margin scarcely beyond the middle; on this fascia are some obscure grey metallic spots; the apical portion of the wing is of the same darker shade as the fascia and contains two curved lines of grey metallic spots, the first running parallel with the central fascia from beyond the middle of the costa to the anal angle, the second again parallel beyond it; the space between these and the apex is also studded with similar spots; cilia pale ochreous, with a tawy-brown line along their base. Underside unicolorous shining brownish ochreous.

Hind wings much excised on the costal margin before the apex. Neuration: 8 veins, 3 and 4 from a point, 5 bent over and nearly touching the base of 4. Brownish ochreous, the apex shaded with fuscous scales; cilia shining pale ochreous, with a brownish shade along their base. Underside unicolorous shining brownish ochreous.

Abdomen ochreous.

Legs ochreous; hind tarsal joints shaded with fuscous.

Exp. al. 20-28 millim.

Hab. West Indies-St. Vincent (windward side, 2 specimens, Smith).

Brazil—Espiritu Santo (Schmidt).

Type, Q.

I have little doubt that the male of this species will be found to possess but 11 veins in the fore wings, as in T. colubrana, Z. This difference in the neuration of the male and female has hitherto been regarded as characteristic of *Amorbia*, Clem., which, however, has no costal fold in the male.

PLATYNOTA, Clem.

PLATYNOTA ROSTRANA, Wkr.

Teras rostrana, Wkr. Cat. Lp. Ins. B. M. xxviii. p. 290 (1863). = Teras restitutana, Wkr. Cat. Lp. Ins. B. M. xxviii. p. 292 (1863).

= Teras connexana, Wkr. Cat. Lp. Ins. B. M. xxviii. p. 293

(1863).

Platynota rostrana, Wlsm. Ill. Typ. Lp. Het. B. M. iv. 5-6, pl. lxii. fig. 1 (1879); Fern. Tr. Am. Ent. Soc. x. no. 114, p. 22 (1882).

Larva. Leaves of orange. (U.S., Fern.)

United States—Florida (Fern.).

S. America—Venezuela (Whr.), Brazil (Ega, Whr.).

West Indies—San Domingo (Wkr.), St. Vincent (Kingstown and

windward side, 2 specimens, Smith).

These two specimens are in poor condition and the dark markings are not distinctly outlined by lines of semi-raised scales as in the type. They are also somewhat smaller; but on the strength of such material I cannot regard them as anything more than a local form.

PLATYNOTA REPANDANA, Wkr.

Teras repandana, Wkr. Cat. Lp. Ins. B. M. xxviii. p. 292 (1863).

West Indies—San Domingo (Wkr.)

The type of this species is erroneously recorded by Walker as a female, it is a male.

CERATORRHINETA.

(CERORRHINETA, Z.)

Type, 3 2 Cerorrhineta calidana, Z. (Cuba). (Plate XLI. fig. 2, a-e.)

Antennæ, 3, scaled and flattened beyond the basal joint, giving a bulged appearance, beyond which they are merely pubescent; \$\preceq\$ simple.

Palpi, \mathcal{F} , thickly clothed; long, curved downwards, apical joint short: \mathcal{F} very long (longer than in the \mathcal{F}), much curved downwards, closely clothed throughout.

Head thickly clothed, with a slight projecting tuft.

Thorax smooth.

Fore wings, \Im , elongate, oblong; with a straight costal fold extending nearly to the apex: Q with the costal margin arched, especially towards the base: apical margin not oblique; with raised scales, as in Platynota, but these are not abundant. Neuration ($\Im \& Q$): 12 veins, 7 and 8 from a common stem, the fork enclosing the apex.

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Hind wings (3 & 9) with the costal margin not excised. Neuration: 8 veins, 3 and 4 from a point, 5 slightly bent towards origin of 3 and 4, 6 and 7 approximate at origin.

Legs moderate, smooth.

CERATORRHINETA CALIDANA, Z.

Cerorrhineta calidana, Z., Hor. Soc. Ent. Ross. xiii. pp. 116-7 (1877).

West Indies—Cuba (Z.).

I am indebted to Dr. Staudinger for the opportunity of examining the types of this species.

CONCHYLIDINÆ.

CONCHYLIS, Tr.

CONCHYLIS LACTEIPALPIS, sp. n.

Antennæ luteous.

Palpi short, widened at the apex of the second joint with short appressed scales; apical joint short, distinct; cream-white.

Head creamy-white.

Thorax ferruginous, tending to pale ochreous posteriorly.

Fore wings mottled with dark chestnut-brown and bright ferruginous, the intermediate spaces whitish ochreous, apex and cilia whitish ochreous; basal patch rich ferruginous, somewhat angulated at its outer edge beyond the fold; a patch of dark chestnutbrown adjacent to it crosses the fold and extends, more or less interruptedly along the dorsal margin and fold to the lower angle of the cell; a rich ferruginous costal patch about the middle tapers obliquely outwards, and is separated from the other patches of chestnut scales beneath it by a rather shining leaden-grey streak; a rich ferruginous band crosses the wing obliquely before the apex, its inner edge nearly straight, its outer edge slightly angulated below its middle, this band commences on the costal margin at about one fifth from the apex, its lower edge reaching to about the middle of the apical margin; the space preceding it is mottled with rich ferruginous interspersed with leaden-grey scales on a creamwhite ground; apex and cilia whitish ochreous.

Hind wings grey, with cilia of the same colour.

Abdomen grey; underside shining creamy-white.

Legs cream-white.

Exp. al. 8-10 millim.

Hab. West Indies—St. Vincent (windward side, 3 specimens, Smith).

Type, &.

CONCHYLIS PROLECTANA, Mschl.

Cochylis prolectana, Mschl. Ab. Senck. Nat. Ges. xv. pp. 332, 354 (1890).

West Indies—Portorico (Mschl.).

CONCHYLIS TECTONICA, Mschl.

Cochylis tectonica, Mschl. Ab. Senck. Nat. Ges. xv. pp. 332-3, 354 (1890).

West Indies-Portorico (Mschl.).

CONCHYLIS VICINITANA, Mschl.

Cochylis vicinitana, Mschl. Ab. Senck. Nat. Ges. xv. pp. 333, 354 (1890).

West Indies—Portorico (Mschl.).

CONCHYLIS BUNTEANA, Robs.

Conchylis bunteana, Robs. Tr. Am. Ent. Soc. ii. p. 288, pl. viii. fig. 86 (1869); Fern. Tr. Am. Ent. Soc. x. no. 144, p. 26 (1882).

United States—Pennsylvania (Robs.).

West Indies—St. Vincent (1 specimen, Smith).

A single specimen, probably referable to this species, is not in sufficiently good condition to be determined with certainty. The type has a slightly rosy tint, which is apparently wanting in this specimen (perhaps owing to its condition), but I should certainly regard it as a small variety of the same species.

CONCHYLIS, sp.? (near angulatana, Robs.).

West Indies-St. Vincent (windward side, 1 specimen, Smith).

Another species of this genus, somewhat smaller than angulatana, Robs. [Tr. Am. Ent. Soc. ii. p. 286, pl. viii. fig. 81 (1869)], from the United States, but presenting the same general character of markings, is also not in condition to be usefully described.

Conchylis, sp.?

West Indies—St. Vincent (windward side, 1 specimen, Smith). This specimen is in too poor condition to be determined.

GRAPHOLITHINAS.

BACTRA, Stph.

BACTRA LANCEOLANA, Hb.

Tortrix lanceolana, Hb. Tortr. fig. 80 (1800).

Aphelia lanceolana, Stgr. & Wk. Cat. Lp. Eur. (ii.) no. 1006, p. 251 (1871).

Bactra lanceolana, Fern. Tr. Am. Ent. Soc. x. no. 163, pp. 28-9 (1882).

Europe, Africa, Asia, Australia, New Zealand, United States. West Indies—St. Vincent (windward side, 4 specimens, Smith).

Episimus, gen. n.

 $(\epsilon \pi i \sigma \bar{\epsilon} \mu os = \text{somewhat short-nosed.})$

Type, & Carpocapsa transferrana, Wkr. (Brazil). (Plate XLI. fig. 3, a, b.)

Antennæ with the basal joint slightly enlarged, very slightly ciliate, scarcely more than half as long as the fore wings.

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Palpi short, moderately clothed; apical joint exposed, scarcely projecting beyond the face.

Head very wide, flattened to the thorax, the face between the

eyes much flattened, moderately rough-scaled above.

Thorax smooth.

Fore wings elongate, costal margin almost straight, 3 without a costal fold, apical margin very slightly concave, anal angle rounded. Neuration: 12 veins, all separate; 3 much bent up towards 4 on the outer margin.

Hind wings rather triangular, apex somewhat acute, dorsal margin slightly and evenly rounded. Neuration: 8 veins; 3 and 4 from

a point, 5 bent over towards origin of 4.

Apparently allied to Cacocharis, Wlsm., but without a thoracic tuft. Veins 3 and 4 of the hind wings are as in the group of genera allied to Penthina, Tr., but the neuration of the fore wings approaches more nearly that of the Pædisca group.

Episimus transferrana, Wkr.

Carpocapsa transferrana, Wkr. Cat. Lp. Ins. B. M. xxviii. p. 398 (1863).

South America—Brazil (Ega, Wkr.).

Var. vincentana (an sp. n.?).

West Indies-St. Vincent (1 specimen, Smith).

With a single specimen before me, in very poor condition, I should not venture to describe it as a distinct species. It is obviously very similar to Walker's type from Ega; the chalybeous black top of the head is a strong distinguishing character, and the markings on the wings are approximately in the same position. Walker describes the darker shades as the ground-colour of the wing, whereas the paler colouring actually predominates (more so in this variety than in the type); moreover they have scarcely a trace of fawn-colour, and would be more accurately described as creamy-The slender leaden cross-streaks which occur in the type are wanting in this specimen, but the transverse linear arrangement of the scales is precisely the same, and if some of the grey streaklets which compose the medio-costal patch were prolonged in the direction of the dorsal margin they would exactly correspond to these lines, which Walker omits to mention in his description. I cannot venture to regard this specimen as distinct from E. transferrana, but it is probably a local variety.

Exp. al. 14 millim.

Type, d.

Episimus augmentana, Z.

Grapholitha (Hedya) augmentana, Z. Hor. Soc. Ent. Ross. xiii. pp. 162-3 (1877).

West Indies—Cuba (Z.).

I am indebted to Dr. Staudinger for the opportunity of examining the type of this species.

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CACOCHARIS, gen. n.

(κακόχαριs=ill-omened.)

Type, $\mathcal{F} \subsetneq Cacocharis$ albimacula, Wlsm. (Plate XLI. fig. 4, a, b.)

Antennæ not more than half the length of the fore wings, simple in both sexes.

Palpi placed rather wide apart, short, projecting but little beyond the head; second joint somewhat dilated at the apex above and beneath; apical joint short, distinct.

Head moderately crested above.

Thorax with a strong erect crest posteriorly.

Fore wings rather ovate, costal margin slightly arched, of without a costal fold, apex obtuse, apical margin not indented nor oblique, anal angle rounded. Neuration: 12 veins, all separate; 3 bent up towards 4 on the apical margin; 6 slightly bent down towards 5.

Hind wings trapezoidal, apex rounded, somewhat bulged between the apical and dorsal margins. Neuration: 8 veins; 3 straight, 4 from the same point as 3, bent upwards towards 5 on its basal half; 5 closely approximate to 4 at the base.

Legs with the hind tibiæ stout, somewhat clothed.

This genus is intermediate between *Pædisca*, Tr., and *Penthina*, Tr., approaching the latter in the possession of a thoracic tuft and in having veins 3 and 4 of the hind wings from a point; in all other respects it belongs to the group of *Pædisca*, but is without a costal fold.

CACOCHARIS ALBIMACULA, sp. n.

Antennæ and palpi reddish brown.

Head reddish brown.

Thorax reddish brown, with a conspicuous bright chestnut tuft

posteriorly, preceded and followed by some whitish scales.

Fore wings rich chestnut-brown, with a conspicuous white costal patch about the middle of the wing, containing two or three minute black streaklets on the extreme costal margin; mottled with fuscous and purplish-grey patches; the white costal patch is preceded and followed by a fuscous tinge; a brownish patch lies on the outer half of the fold, and a blackish patch of somewhat raised scales near the base of the dorsal margin is surrounded by purplish grey; about the outer end of the brown patch is another space of purplish grey, and between this and the apical margin another transverse patch of the same colour, somewhat paler; one or two very faint pale oblique streaklets, from the costa before the apex, are joined to a slender pale line along the margin at the base of the cilia, which, however, does not reach the anal angle; cilia brown, tipped with fuscous.

Hind wings fuscous, with an iridescent tinge; cilia fuscous.

Abdomen fuscous.

Legs pale greyish cinereous; hind tarsal joints spotted with fuscous.

Exp. al. 14 millim.

Hab. West Indies—St. Vincent (1 specimen, Smith).

Type, \mathfrak{P} .

Having only a single Q of this species from St. Vincent I have used a \mathcal{S} from Brazil in drawing up the generic description.

PHOXOPTERIS, Tr.

PHOXOPTERIS VIRIDIDORSANA, Mschl.

Phoxopteryx virididorsana, Mschl. Ab. Senck. Nat. Ges. xv. pp. 334, 354 (1890).

West Indies—Portorico (Mschl.).

GRAPHOLITHA, H.-S.

GRAPHOLITHA LIVENS, sp. n.

[Head missing.]
Thorax slaty grey.

Fore wings deep brownish fuscous, mottled with curved bands and spots of slaty-grey; the basal half of the wing is entirely occupied by transverse bands of this colour, separated from each other by slender lines of the dark ground-colour, of which one is longitudinal from the base, reaching but a short way into the wing; one above it, also short, is oblique from the costa; and one below it from the dorsal margin, somewhat wider, pointed obliquely outwards; the outer edge of the mottled basal patch is curved outwardly, reaching much farther along the dorsal than on the costal margin, where it does not attain to the middle of the wing; about the middle of the wing is an outwardly oblique costal streak of slaty-grey, curved at its lower end and more or less blended with a shorter streak beyond it; between this pair of streaks and the apex of the wing are three other similar streaks, the first running obliquely outwards from the costa to the upper third of the apical margin, where it meets a shorter and less oblique subapical streak; between these two is a third very short streaklet on the extreme costal margin; all these five streaks are touched with whitish scales, and some are also visible on the extreme costal edge of the basal patch; above the anal angle is an irregular, somewhat ocelloid, spot formed of two curved slaty-grey streaks; throughout the wings these slaty-grey bands are somewhat shining in contrast with the dull ground-colour; cilia dark slaty-grey. Underside unicolorous brownish fuscous, with five small whitish costal spots.

Hind wings brown; cilia pale grey.

Abdomen brownish.

Legs pale greyish; hind tarsal joints spotted alternately with greyish white and fuscous.

Exp. al. 12 millim.

Hab. West Indies-St. Vincent (1 specimen, Smith).

Type, Q.

This specimen has unfortunately lost its head; there can be no doubt as to the genus in which it should be placed, but in markings [14]

it is very distinct from anything with which I am acquainted. The pattern, although difficult to describe, is fairly well-defined.

GRAPHOLITHA? EXCITANA, Mschl.

Grapholitha excitana, Mschl. Ab. Senck. Nat. Ges. xv. pp. 333-4, 354 (1890).

West Indies-Portorico (Mschl.).

COPTOLOMA, Ld.

COPTOLOMA? FIGURANA, Z.

Grapholitha (Coptoloma?) figurana, Z. Hor. Soc. Ent. Ross. xiii. pp. 163-5, pl. ii. fig. 55 (1877).

Imago, 17 December (Z.).

West Indies—St. Thomas (Z.).

COPTOLOMA? ALBICAPITANA, sp. n.

Antennæ fuscous.

Head and palpi white.

Thorax fuscous.

Fore wings brownish fuscous, blending to ferruginous brown, about the apex much streaked and dotted with cream-white and steel-blue lines and spots; a steel-blue spot at the base of the costal margin is followed before the middle by an oblique short costal streak of the same colour, and this is also followed, beyond the middle, by a more slender similar streak, bulging outwardly, dilated and deflected towards the anal angle; near the dorsal margin, at one third from the base, is a cream-white spot, from above which a slender cream-white line, shaped like a horseshoe, is bowed outwards, and returns to a smaller cream-white spot above the fold, enclosing the outer end of a short longitudinal steel-blue streak; above the middle of the dorsal margin is a small steel-blue spot followed by another slightly above and beyond it, which is separated from a third elongate spot above the middle of the wing by a slender cream-white line; the two lower of these spots are enclosed by slender waved cream-white lines, at a little distance from them but following their outline; these lines do not reach the dorsal margin nor do they meet between the spots; on the chestnut-brown apical portion of the wing are two or three cream-white costal spots or streaks, the outer one being the longest, and having some steel-blue scales at its lower end; between these spots and around the apex the extreme margin of the wing is fuscous; cilia blue-grey. Underside unicolorous greyish fuscous, with three costo-apical white spots

Hind wings brownish fuscous, darker towards the apex; cilia greyish.

Abdomen fuscous; underside cream-whitish.

Legs greyish fuscous; spurs paler.

Exp. al. 10 millim.

Hab. West Indies-St. Vincent (windward side, 1 specimen, Smith).

Type, Q.

Having only a ♀ I am unable to be quite certain that this species is rightly referred to Coptoloma, Ld.

Pædisca, Tr.

PÆDISCA LONGIPALPANA, Mschl.

Grapholitha (Pædisca, Ld.) longipalpana, Mschl. Ab. Senck. Nat. Ges. xv. pp. 333, 354 (1890).

West Indies-Portorico (Mschl.).

CROCIDOSEMA, Z.

CROCIDOSEMA PLEBEIANA, Z.

Crocidosema plebeiana, Z. Is. 1847, p. 721; Stgr. & Wk. Cat. Lp. Eur. (ii.) no. 1269, p. 263 (1871).

Europe, Australia, South America (Wlsm.).

West Indies—St. Vincent (Kingstown, 1 specimen; windward side, 3 specimens, Smith).

This genus is apparently widely distributed in South America, as I have specimens from Brazil, Peru, and the Argentine Republic.

STREPSICRATES, Meyr.

Strepsicrates, Meyr. Tr. N.-Z. Inst. xx. p. 73 (1887). = § Strepsiceros, Meyr. Proc. Linn. Soc. N. S. W. vi. pp. 678-9 (1882).

STREPSICRATES SMITHIANA, sp. n.

Antennæ cinereous.

Palpi cinereous, mottled with brownish at the ends of the joints externally, hoary on their inner sides.

Head brownish cinereous, the lower half of the face hoary.

Thorax cinereous.

Fore wings dark brownish, pale cinereous along the dorsal margin beneath the fold; in the 3 the costal fold is dark brown with a pale costal patch at its outer end, there is also a tuit of raised scales below the middle of the fold, and tuits of similar darker scales near the base above and below the fold; in the 2 the tuits of raised scales are absent, and there appears to be some slight variation in the mottling of the wing-surface, the dark brown ground-colour becoming especially concentrated along the middle and above the outer end of the fold; the apical portion of the costa is much mottled with pale cinereous, which is diffused across the wing obliquely backwards towards the outer end of the fold; some pale cinereous scales about the anal angle; cilia brownish, tending to pale cinereous at the anal angle.

Hind wings semitransparent, blue-grey, obscured with brown [16]

along the veins and margin, especially towards the abdominal margin; cilia cinereous, with a pale line along their base.

Abdomen brownish cinereous.

* Legs pale cinereous; hind tarsal joints faintly speckled.

Exp. al. 13-14 millim.

Hab. West Indies—St. Vincent (windward side, 3 specimens, Smith); Dominica (one specimen given me by Mr. H. Druce).

Tune, 3 9.

This species agrees in structure with ejectors, War., an Australian species. I may remark that veins 6 and 7 of the hind wings, although perhaps not actually from a common stem, have so much the appearance of being so that a mistake might easily arise. They are almost anastomosed along their basal half, having the appearance of a double vein grooved along its under surface rather than of two separate veins. I find the same structure prevailing in the Australian species.

Heligmocera, gen. n.

(éhiyués=a sinubsity; sepas=a born.)

Type, of Helipmocera calcifrons, sp. nov. (Plate XLI. fig. 5, a-d.)

Antennæ (d) stout, strongly pubescent beneath: basal joint thickened, beyond which is a strong sinussity on the upper side, extending over several joints.

Palpi not thickly clothed, with the basal joint unusually long, slightly upturned; second joint long, projecting forward; apical

joint fully half the length of the second, slightly depressed.

Haustellum verv short.

Head clothed above: face flattened, almost excavate between the eves, and slotting back to the base of the antennes.

Thoraz not tuited.

Fore wings elongate, costs slightly arched, of with a strong costal fold containing a thick must of hairs; apical margin oblique, slightly concave, apex slightly produced, and angle rounded. Neurotion: 12 veins; 3 and 4 closely approximate throughout, curved upwards nearly to middle of apical margin; 5 straight, arising very near 4, about the lower angle of cell and ending on the middle of the apical margin in close proximity to 4: 6 bent down towards 5 on margin; 7 and 8 from a common stem, 7 bent down towards 6, 8 to costal margin above apex; 9 arising from upper angle of cell close to origin of 7 + 8.

Hind wings broader than the fore wings, with a broadly lancedlate apex, abdominal angle strongly developed and heavily fringed, especially at the base. Neurotion: 8 veins: 3 and 4 from a long common stem; 5 bent over to origin of 3+4; 6 and 7 from a common

SEM.

Leps: hind tibize densely clathed with projecting scales above the sours.

HELIGMOCERA CALVIFRONS, sp. n.

Antennæ cinereous.

Palpi cinereous.

Head cinereous above; face whitish.

Thorax cinereous.

Fore wings (3) with a broad costal fold; cinereous, mottled with brownish; with an ill-defined greenish basal patch, mottled with brownish, extending along the dorsal margin to nearly one third the wing-length, where is a patch of deep brownish fuscous scales; beyond it is a broad ill-defined pale space; the apical half of the wing mottled with greenish and brownish fuscous; a chestnutbrown spot immediately before the anal angle; the costal margin very pale cinereous, almost whitish, with a series of oblong brownish fuscous streaks alternately short and long, the long ones terminated by a few chestnut-brown scales; there are some shining greenishgrey metallic scales about the ocelloid spot which is separated from the apex by a curved brownish fuscous line occupying the middle of the apical margin, and recurved in the direction of the upper angle of the cell, where it nearly joins the middle costal streak, the extreme apex brownish fuscous; cilia pale cinereous along their base, brownish fuscous beyond.

Hind wings semitransparent, iridescent, blue-grey, matted with brownish cinereous scales about the abdominal margin, and with a strong fringe of subochreous matted scales from the base near the abdominal margin; cilia greyish fuscous, with a pale line along

their base.

Abdomen brownish fuscous mottled with pale cinereous, anal tuft paler. Underside pale cinereous.

Hind legs brownish fuscous mottled with pale cinereous, tarsal

joints also spotted with pale cinereous or subochreous.

Epp. al. 13 millim.

Hab. West Indies—St. Vincent (windward side, 2 specimens, Smith).

Type, 3.

TINEIDÆ.

TINEINÆ.

TINEA, L.

TINEA PLUMELLA, sp. n.

Antennæ with the basal joint slightly hairy; greyish, with indistinct paler annulations.

Maxillary palpi folded.

Labial palpi short, projecting; greyish.

Head hairy above and in front; dingy grey.

Thorax pale whitish grey.

Fore wings dingy whitish, sprinkled with brownish-grey scales, especially on the basal half; a brownish-grey spot at the base of the fold; an indistinct transverse fasciaform band of scattered brownish-grey scales about the middle is diffused outwards on reaching the

 $\lfloor 18 \rfloor$

fold, reverting to the dorsal margin; beyond it the white ground-colour is less sprinkled for a short space, but the apical third of the wing is blotched with brownish-grey spots, more or less connected by intermediate scattered scales—one central at the end of the cell; two costal, the first immediately above the central one, the other beyond it; one apical at the extreme apex; two less conspicuous dorsal ones, the first small, immediately below the central spot, the second also inconspicuous, immediately opposite the outer costal spot; cilia dingy whitish, with some brownish-grey scales running through them wherever the dark spots touch the margin.

Hind wings pale grey; cilia whitish grey.

Abdomen very pale brownish grey.

Exp. al. $6\frac{1}{2}$ millim.

Hab. West Indies—St. Vincent (1 specimen, Smith).

Type, \mathfrak{P} .

A small but sufficiently distinct species, probably approaching cumulatella, Z., from South America, but having a whiter ground-colour.

TINEA sp.

West Indies—St. Vincent (1 specimen, Smith).

A single specimen in too poor condition to determine.

Exp. al. 6 millim.

Tinea? sp., Btl.

Tinea ? sp., Btl. P. Z. S. 1878, p. 495.

West Indies-Jamaica (Btl.).

DENDRONEURINÆ, subfam. nov.

Labial palpi strongly developed, folded.

Fore wings with veins 5, 7, and 8 out of 6.

DENDRONEURA, gen. nov. = Οροσονα $(\delta \epsilon \nu \delta \rho o \nu = a \text{ tree}; \nu \epsilon \hat{\nu} \rho o \nu = a \text{ nerve.})$

Type, & Dendroneura præstans, Wlsm. (Plate XLI. fig. 6, a-c.)
Antennæ nearly as long as the fore wings; basal joint flattened, scarcely enlarged.

Maxillary palpi well developed, folded.

Labial palpi short, depressed, clothed with appressed scales; apical joint scarcely shorter than the second, flattened, subovate.

Haustellum moderate.

Head much flattened, with a strong brush of radiating scales from each side behind the eyes.

Thorax somewhat flattened, smooth.

Fore wings long, narrow, acuminate, costal and dorsal margins nearly straight, anal angle obsolete; a narrow mat of scales along the costal margin beneath gives the appearance of a downward fold.

Neuration: 12 veins; 2 from near lower angle of cell; 3 from angle of cell; 4 separate from 3; 6 from upper angle of cell to apical

[19]

margin; 7 and 8 one after another out of 6, the one before, the other behind the origin of 5, 7 to costa; 9, 10, and 11 separate; a small supplementary cell caused by the continuation of 6 to between 10 and 11.

Hind wings narrow, evenly lanceolate, acuminate; with very long cilia extending to the base of the costal margin. Neuration: 8 veins; 3 and 4 separate; 5 and 6 from a common stem, 6 to apex; 7 parallel with 6.

Abdomen somewhat flattened.

Legs with the hind femora much flattened and somewhat concave

at their outer sides; hind tibiæ hairy.

This very inconspicuous and ordinary-looking Tineid differs entirely in its structural characters from any genus or subfamily hitherto described; the neuration is very peculiar, somewhat resembling that of *Œcocecis*, Gn., to which, however, it is not allied.

A single female, possessing the same remarkable neuration which characterizes this genus, differs in the structure of the palpi and in the slightly greater expanse and breadth of the wings. Having at first regarded it as a separate species, I am now strongly convinced that it is but the other sex of *Dendroneura præstans*. A description, so far as it indicates structural differences, is appended:—

Labial palpi porrected, scarcely twice the length of the head; second joint with a projecting brush of scales below, a pecten of three or four separate hairs on its outer side near the apex; apical joint smooth, short, scarcely more than half the length of the second

joint, not recurved nor erect.

Abdomen laterally compressed; ovipositor extended, long.

If any reasonable doubt can be entertained as to the identity of this female with the male on which the genus is founded, it must be based upon the difference in the shape of the head, which is of the ordinary form, not flattened or fringed at the side in the manner so remarkable in the type.

DENDRONEURA PRÆSTANS, Sp. n.

Antennæ and palpi pale greyish ochreous.

Head pale greyish ochreous; face shining white.

Thorax dull greyish ochreous.

Fore wings dull greyish ochreous, with a narrow transverse line of slightly raised brownish fuscous scales before the apex, at the upper end of which is a minute oblique spot of similar scales turning backwards from the costal margin; cilia dull greyish, with an ochreous tinge.

Hind wings pale greyish, with a slight ochreous tinge; cilia greyish,

tinged with ochreous towards their apex.

Abdomen rather shining, ochreous.

Legs shining, pale cinereous; tarsal joints unspotted.

Exp. al. 312 millim., 914 millim.

Hab. West Indies—St. Vincent (windward side, 2 specimens, Smith).

Type, \mathfrak{F} . $\lceil 20 \rceil$

Setomorphinæ.

SETOMORPHA, Z.

SETOMORPHA RUPICELLA, Z.

Setomorpha rupicella, Z. Hand. Kong. Svensk. Vet.-Ak. 1852, pp. 95-6.

West Indies—Cuba (Havannah, Z.).

This species, having been described by Zeller in a paper entitled "Lepidoptera Microptera quæ J. A. Wahlberg in Caffrorum terra collegit," is not unlikely to be overlooked.

ANAPHORINAS.

EULEPISTE, Wlsm.

Type, Eulepiste cressoni, Wlsm. (United States).

In the original description of this genus (Tr. Am. Ent. Soc. x. p. 169, 1882), which was not corrected in my revision of the Anaphorinæ (Tr. Ent. Soc. Lond. 1887, p. 142), I fear that I must have mistaken the basal joint of the palpi for the second joint, the second joint being much less roughly clothed than the basal, and the apical joint is almost smooth. The proportionate length that they bear to each other is approximately as follows:—the second joint is rather longer than the apical joint, and the basal joint is about equal in length to the second; the apical joint stands for its whole length clear above the head, but it is not recurved.

EULEPISTE UMBRATIPALPIS, sp. n. (Plate XLI. fig. 10.)

Antennæ pale fawn, closely barred above with dark umber-brown, basal joint dark umber-brown above.

Palpi very dark umber-brown.

Head pale fawn above, speckled with dark umber-brown.

Thorax pale fawn, shaded anteriorly and around the margins with dark umber-brown and a few reddish-brown scales.

Fore wings pale fawn, thickly spotted and shaded with dark umber-brown, with some reddish-brown scales intermixed, the markings on the costal margin somewhat more distinctly separated from each other than are those on the wing-surface; the most conspicuous and darkest shading is above the anal angle, on the space between the end of the cell, and on the lower half of the costal margin; cilia dark umber-brown, mixed with pale fawn and reddish brown. Underside shaded with dark umber-brown, a pale fawn line running along the base of the cilia and around the apical margin.

Hind wings cinereous, a slightly paler line running along the base

of the cilia. Underside cinereous.

Abdomen cinereous; lateral claspers slender, evenly depressed posteriorly; uncus slender, double, the points closely approximate.

Hind legs dark brownish; tarsal joints spotted with pale fawn.

Exp. al. 19 millim.

Hab. West Indies-San Domingo, 1884.

Type, & Mus. Wlsm.

I have a single specimen, for which I am indebted to Dr. Fernald. Proc. Zool. Soc.—1891, No. XXXV. 35

ACROLOPHUS, Poey.

ACROLOPHUS VITELLUS, Poey. (Plate XLI. fig. 11.)

Acrolophus vitellus, Poey, Cent. Lp. Cuba, pl. (xx.) (1833); Wlsm. Tr. Ent. Soc. Lond. 1887, p. 148.

West Indies—Cuba (Poey); ? Portorico (Wlsm.).

A specimen in Dr. Staudinger's collection from Portorico agrees with Poey's description in the structure of the palpi and antennæ as well as in neuration; the fore wings have the usual indication of a biangulate line along the neighbourhood of the fold, margined with dark shades above and by the pale ground-colour below, this line runs'slenderly but distinctly to the base; two angular dark shades cross the fold, the outer one being connected on the left wing by two lines of darker scales to the middle of the dorsal margin; costal margin distinctly spotted, the spots near the base taking the form of waved striæ reaching to the upper edge of the cell. The hind tarsal joints are somewhat strongly clothed with tufts of scales, reminding one of Thysanoscelis, Wlsm. I have not observed this character in any other specimen of the same family from the West Indies. The genital segments of this specimen are given on Plate XLI. fig. 11. The uncus is double.

Exp. al. 22 millim.

ACROLOPHUS POEYI, sp. n. (Plate XLI. fig. 12.)

Antennæ, \Im , stout, simple, reaching to about two thirds the length of the wing; \Im somewhat more slender than in the \Im .

Pulpi, \Im , long and recurved, not thickly clothed and not reaching so far as the back of the head; umber-brown, tinged with whitish ochreous beneath: \Im , projecting, conical.

Head and thorax umber-brown.

Fore wings: \Im , umber-brown, with a few paler mottlings and specklings of brownish ochreous along the costal and dorsal margins and towards the apex, and with some small fuscous spots of scales scattered throughout the wing; costal margin narrowly brownish ochreous throughout; no particular pattern is visible on the wing, but there is a tendency in the distribution of the blackish scale-spots to form a sinuous dividing line along the fold, leaving the dorsal portion below it of the paler tint; cilia brownish ochreous, with a dark line running through their middle: \Im almost unicolorous pale umber-brown, having a less mottled or speckled appearance than the \Im .

Hind wings umber-brown, with cilia of the same colour.

Abdomen umber-brown. Genital segments, 3: uncus single, bent over at right angles; lateral claspers slender and of almost even width throughout, rounded at the ends and not projecting beyond the uncus.

Legs greyish; hind tarsal joints speckled alternately with umberbrown and subochreous; hind tibiæ slightly hairy.

Exp. al. ♂ 10-12 millim., ♀ 11-18 millim.

Hab. West Indies—St. Vincent (windward side, 10 specimens, Smith).

Type, & Q.

I have named this species after the late Prof. Felipe Poey, the author of 'Centurie de Lépidoptères de l'île de Cuba' (Paris, 1833 et seq.), a book which I have in vain endeavoured to find in the market for many years.

ACROLOPHUS NIVEIPUNCTATA, sp. n.

Antennæ pale fawn.

Palpi reddish fawn mixed with rust-brown, which is especially noticeable on the exposed side; apical tuft long, almost entirely rust-brown.

Head and thorax reddish fawn mixed with rust-brown.

Fore wings pale reddish fawn, suffused with rust-brown over the greater portion of the wing-surface, except along the dorsal margin and about the apical margin and apex, the pale ground-colour appears also at the extreme base; the rust-brown shading projects into the paler colour, first in an angulated excrescence near the base, which crosses the fold, and secondly in a semicircular projection a little before the middle, which crosses the middle of the fold, from the outer and upper edge of this the rust-brown shading is deflected to the anal angle; a chain of about seven small fan-like, raised snow-white scales, commencing near the base, forms a straight margin to the upper edge of the first angular projection, reaching to the highest point of the pale ground-colour above the fold; a second chain of similar snow-white scales commences within the outer and upper portion of the semicircular projection, consisting of about nine raised dots, follows the edge of the dark shading about halfway along its deflection to the anal angle; the apical portion of the wing is slightly speckled with rust-brown, a few inconspicuous streaklets of the same colour occur near the apical margin and on the pale dorsal space; cilia mixed pale fawn and rust-brown. Underside greyish fuscous, tinged with rust-brown along the costal margin.

Hind wings stone-greyish; cilia scarcely paler. Underside dull

greyish fuscous, slightly paler than in the fore wings.

Abdomen missing. (A female abdomen is stuck on to this specimen.)

Legs pale stone-grey, somewhat tinged with rufous beneath; hind tarsi not tufted above.

Exp. al. 31 millim.

Hab. West Indies—Cuba.

Type, & Mus. Stgr.

ACROLOPHUS PLUMIFRONTELLUS, Clem.

Anaphora plumifrontella, Clem. Proc. Ac. Nat. Sc. Phil. xi. p. 261 (1859); Stn. Tin. N. Am. pp. 39, 57, 59, 60 (1872).

Acrolophus plumifrontellus, Wlsm. Tr. Ent. Soc. Lond. 1887, 35*

pp. 149-50, pl. vii. fig. 5; Mschl. Ab. Senck. Nat. Ges. xv. pp. 336, 354 (1890).

United States—Pennsylvania, N. Carolina, Massachusetts, New York.

West Indies—Portorico (Mschl.), Cuba (Wlsm.).

ACROLOPHUS WALSINGHAMI, Mschl. (Plate XLI. fig. 13.)

Acrolophus walsinghami, Mschl. Ab. Senck. Nat. Ges. xv. pp. 335, 336, 354 (1890).

West Indies—Portorico (Mschl.).

A specimen in Dr. Staudinger's collection, also from Portorico, which appears to be this species, has the anal claspers slender, incurved, of almost even width throughout, very slightly widened and obliquely rounded upwards at the end; uncus single.

ACROLOPHUS LEUCODOCIS, Z.

Anaphora leucodocis, Z. Hor. Soc. Ent. Ross. xiii. pp. 197-8 (1877); Wlsm. Tr. Ent. Soc. Lond. 1887, pp. 159-60.

? Brazil (**Z**.).

West Indies—Cuba (Z.).

I am indebted to Dr. Staudinger for the opportunity of examining Zeller's type, which is labelled "Brasil?" It is a very distinct species, having a pale line running to the end of the cell from the middle of the base, which is continued in three slender lines along the veins to the apical margin; this is bordered on the upperside by a blackish line, which reaches beyond the end of the cell, and there are three lines of black atoms, the first beneath the costa to two thirds from the base, the second along the lower edge of the cell reaching to its end and sometimes continued downwards to the apical margin above the anal angle, the third is below the fold. I am unable to describe the genital segments, as the type, which is a male, has a female abdomen stuck on to it. Exp. al. 22 millim.

The antennæ are simple, and it should therefore be placed in the

genus Acrolophus.

CÆNOGENES, WISM.

CÆNOGENES PUSILLA, Z.

Anaphora pusilla, Z. Hor. Soc. Ent. Ross. xiii. pp. 196-7 (1877); Wlsm. Tr. Ent. Soc. Lond. 1887, pp. 158-9, pl. viii. f. 13.

In my revision of the Anaphorinæ this species was retained by error in the genus Anaphora, Clem., whereas it should have been placed in Cænogenes; this mistake was occasioned by my having failed to observe in my previous examination that veins 8 and 9 of the fore wings arise from a short common stem. The antennæ are pilose and serrate throughout on one side, but they differ slightly from those of the type of Cænogenes, which has them serrate on both sides.

Hab. Colombia—Barranquilla (von Nolcken).

West Indies—Dominica (Druce).

A single specimen, for which I am indebted to Mr. Druce, is undistinguishable from Zeller's type, but it is not in good condition.

CÆNOGENES? OCHRACEA, Mschl.

Cænogenes? ochracea, Mschl. Ab. Senck. Nat. Ges. xv. pp. 337, 354 (1890).

West Indies—Portorico (Mschl.).

ANAPHORA, Clem.

Anaphora popeanella, Clem.

Anaphora popeanella, Clem. Proc. Ac. Nat. Sc. Phil. xi. p. 261 (1859); Stn. Tin. N. Am. pp. 57-8 (1872); Wlsm. Tr. Ent. Soc. Lond. 1887, pp. 161-3, pl. viii. f. 11; Mschl. Ab. Senck. Nat. Ges. xv. pp. 337, 354 (1890).

United States-Texas, Missouri, N. Carolina.

West Indies—Portorico (Mschl.).

I am somewhat doubtful whether Möschler was rightly acquainted with this species.

Anaphora arcasalis, Wkr.

Palthis? arcasalis, Wkr. Cat. Lp. Ins. B. M. xvi. pp. 153-4 (1858).

West Indies—San Domingo (Wkr.).

Anaphora mimasalis, Wkr.

Palthis? mimasalis, Wkr. Cat. Lp. Ins. B. M. xvi. p. 154 (1858). West Indies—San Domingo (Wkr.).

Anaphora noctuina, sp. n. (Plate XLI. fig. 14.)

Antennæ bone-ochreous.

Palpi, head, and thorax pale fawn, much mixed with purplish

grey and fuscous.

Fore wings pale fawn, almost entirely suffused with purplish fuscous, the ground-colour showing chiefly along the fold, and on and beyond the end of the cell and about the apex; two slender angulated blackish marks on the fold, the outer one enclosing a reddish-brown spot; another reddish-brown spot lies above and between these two, about the middle of the cell, and this is externally margined with blackish; a few reddish-brown scales at the end of the cell intermixed with blackish, the same mixture being continued in a rather diffused curved line downwards towards the anal angle as far as vein 4, and thence upwards and outwards towards the apex, forming the lower margin of a space of the pale ground-colour; cilia purplish grey, mottled with pale fawn.

Hind wings pale fawn, faintly shaded with brownish; cilia pale

fawn.

Abdomen pale fawn; lateral claspers shaped somewhat as in a

marrow-spoon, elongate, scarcely spatulate, with almost parallel margins, rounded at the ends; uncus double.

Legs pale fawn; hind tarsi faintly spotted.

Exp. al. $30\frac{1}{2}$ millim.

Hab. West Indies-Cuba.

Type, & Mus. Stgr.

I have adopted the specific name from a label placed by Zeller on Dr. Staudinger's specimen.

FELDERIA, Wlsm.

FELDERIA DIMIDIELLA, sp. n. (Plate XLI. fig. 15.)

Antennæ pale fawn-ochreous.

Palpi umber-brown at the base, pale fawn-ochreous beyond.

Head and thorax pale fawn-brown.

Fore wings pale fawn, sprinkled, speckled, and shaded with brownish scales; a series of dark umber-brown spots—the first small, a little below the costal margin near the base; the second larger, on the fold before the middle; the third also large, on the fold beyond the middle; the fourth at the end of the discal cell, a slight indication of a fifth spot lying parallel with the middle of the apical margin; cilia very pale fawn.

Hind wings dingy whitish fawn; cilia scarcely paler.

Abdomen dingy whitish fawn.

Legs whitish fawn; tarsi unspotted.

Exp. al. 20 millim.

Hab. West Indies—Cuba.

Type, & Mus. Stgr.

The pectinations of the antennæ are much shorter than in Felderia doeri, Wlsm., the type of the genus. This specimen is labelled in Zeller's handwriting "Acrolophus vitellus nicht beschr." It cannot be vitellus, Poey, as the antennæ of that species are described as simple.

BAZIRA, Wkr.

Bazira, Wkr. Cat. Lp. Ins. B. M. xxx. p. 1009 (1864). = § Eddara, Wkr. Cat. Lp. Ins. B. M. xxviii. pp. 517–8 (1863).

BAZIRA XYLINELLA, Wkr.

Eddara xylinella, Wkr. Cat. Lp. Ins. B. M. xxviii. p. 518 (1863). Bazira xylinella, Wkr. Cat. Lp. Ins. B. M. xxx. p. 1009 (1864).

West Indies—Jamaica (Wkr.).

The type of this species is erroneously recorded by Walker as a male; it is a female. In the absence of the male, it is impossible to say whether this genus can be regarded as distinct. The palpi are short and porrect; the fore wings have 12 veins, all separate, and the hind wings 8 veins, all separate. I am inclined to think it is allied to Pseudanuphora arcanella, Clem.

EUPLOCAMIN.E.

AMYDRIA, Clem.

AMYDRIA ANAPHORELLA, sp. n.

Antennæ, &, simple, basal joint somewhat enlarged; brownish.

Palpi erect, second joint roughly clothed beneath; apical joint less than half the length of the second joint; brownish ochreous, tinged with brown externally on the second joint.

Head brownish ochreous. Thorax greyish fuscous.

Fore wings greyish fuscous, with a slight bluish tinge, speckled with a reduplicated line of darker spots along the basal half of the costal margin, and three or four spots on the margin beyond the middle; a quadrate chocolate-brown patch at the end of the cell is preceded by a paler reddish-brown elongate spot, and followed by a brownish-ochreous space extending to the apex; a second elongate chocolate-brown patch on and above the outer half of the fold is also preceded by a shorter elongate reddish-brown spot, of which equal parts are on the upper and under side of the fold; cilia brownish ochreous, shaded with greyish fuscous.

Hind wings brownish grey; cilia slightly paler.

Abdomen brownish grey.

Legs greyish cinereous, tarsal joints faintly pale-spotted.

· Exp. al. 22 millim.

Hab. West Indies—St. Vincent (windward side, 1 specimen, Smith).

Type, J.

This species has the same neuration as Clemens' genus Amydria, all the veins in both fore and hind wings being separate: the apical joint of the palpi is not tufted as in Pseudanophora, Wlsm., nor recurved as in Anaphora, Clem.; it is, however, more erect than in effrenatella, Clem., the type of Amydria, and appears to form a connecting-link between this genus and Pseudanaphora.

MYRMECOZELA, Z.

MYRMECOZELA OCHRACEELLA.

Tinea ochraceella, Tengstr. Not. Sällsk. Faun. et Flor. Fenn. För.

ii. p. 111 (1847).

Myrmecozela ochraceella, Z. Lin. Ent. vi. pp. 176-7 (1852); Stgr. & Wk. Cat. Lp. Eur. (ii.) no. 1435, p. 271 (1871); Mschl. Ab. Senck. Nat. Ges. xv. pp. 339, 354 (1890).

Europe.

West Indies—Portorico (Mschl.).

Tiquadra, Wkr.

Tiquadra, Wkr. Cat. Lp. Ins. B. M. xxviii. p. 519 (1863); type Tiquadra inscitella, Wkr. (Mexico).

= Oscella, Wkr. Cat. Lp. Ins. B. M. xxix. pp. 783-4 (1864);

type Oscella æneonivella, Wkr. (Venezuela).

= Manchana, Wkr. Cat. Lp. Ins. B. M. xxxv. p. 1818 (1866); type Manchana avitella, Wkr. (Santa Martha).

= Acureuta, Z. Hor. Soc. Ent. Ross. xiii. pp. 198-9 (1877); type

Acureuta aspera, Z. (Colombia).

TIQUADRA ASPERA, Z.

Acureuta aspera, Z. Hor. Soc. Ent. Ross. xiii. pp. 199-201 (1877).

Tiquadra aspera, Mschl. Ab. Senck. Nat. Ges. xv. pp. 339, 354 (1890).

Colombia.

West Indies—Portorico (Mschl.).

TIQUADRA LENTIGINOSA, Z.

Acureuta lentiginosa, Z. Hor. Soc. Ent. Ross. xiii. pp. 201-2 (1877).

Brazil, Peru.

West Indies—Trinidad (Port of Spain: Wlsm.).

I have a single female from Trinidad, for which I am indebted to Mr. J. H. Hart; this agrees with specimens of the same sex from Petropolis (Brazil), which I am unable to separate from Acureuta lentiginosa, Z. The males have the hind wing somewhat more ochreous than in the female and the fore wings less profusely spotted, but the amount of grey scaling on their surface is somewhat variable.

TIQUADRA? sp.

West Indies-Dominica.

A single specimen received from Mr. Druce, collected in Dominica, is of a much darker colour and smaller size; moreover there is a conspicuous difference in the neuration of the fore wings, which have veins 3 and 4 arising from a short stalk. It may possibly constitute a new genus; but the specimen is a female, and in such poor condition that it cannot be usefully described.

PEXICNEMIDIA, Mschl.

PEXICNEMIDIA MIRELLA, Mschl.

Pexicnemidia mirella, Mschl. Ab. Senck. Nat. Ges. xv. pp. 338, 354 (1890).

West Indies—Portorico (Mschl.).

PLUTELLINÆ.

PLUTELLA, Schrk.

PLUTELLA CRUCIFERARUM, Z.

Plutella cruciferarum, Z. Stett. Ent. Zeit. 1843, p. 281; Stgr. & Wk. Cat. Lp. Eur. (ii.) no. 1626, pp. 281, 425 (1871).
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= Plutella xylostella, Mschl. Ab. Senck. Nat. Ges. xv. pp. 341, 354 (1890).

Europe, Asia, Africa, North-America, South America, Australia. West Indies—Portorico (Mschl.).

GELECHIANÆ.

GELECHIA, Z.

GELECHIA DONATELLA, Wkr.

Gelechia donatella, Wkr. Cat. Lp. Ins. B. M. xxix. pp. 596-7 (1864).

West Indies—Jamaica (Wkr.).

GELECHIA ROBUSTELLA, Wkr.

Gelechia robustella, Wkr. Cat. Lp. Ins. B. M. xxix. p. 597 (1864).

West Indies—San Domingo (Wkr.)

GELECHIA ATTENUATELLA, Wkr.

Gelechia attenuatella, Wkr. Cat. Lp. Ins. B. M. xxx. p. 1019 (1864).

West Indies—Jamaica (Wkr.).

GELECHIA EXCLARELLA, Mschl.

Gelechia exclarella, Mschl. Ab. Senck. Nat. Ges. xv. pp. 343-4, 354 (1890).

Surinam (Mschl.).

West Indies—Portorico (Mschl.).

GELECHIA COSTIPUNCTELLA, Mscbl.

Gelechia costipunctella, Mschl. Ab. Senck. Nat. Ges. xv. pp. 344, 534 (1890).

West Indies-Portorico (Mschl.).

GELECHIA RIVULELLA, Mschl.

Gelechia rivulella, Mschl. Ab. Senck. Nat. Ges. xv. pp. 344, 354 (1890).

West Indies—Portorico (Mschl.).

GELECHIA CINEREOCERVINA, sp. n.

Antennæ pale greyish fawn.

Palpi with projecting scales above towards the apex of the second joint, apical joint about equal in length to the second, slender and slightly recurved; pale greyish fawn, darkened externally on the second joint.

Head pale greyish fawn; face paler.

Thorax pale greyish fawn.

Fore wings with 12 veins; 7 and 8 from a point, running to the costa; dull greyish fawn, with a small fuscous spot on the middle,

followed by another at the end of the cell, slightly preceded by one below it on the fold; an elongate narrow fuscous shade along the costal margin beyond the middle and four fuscous dots around the apex—two on the costal and two on the apical margin; cilia dull greyish fawn.

Hind wings with 8 veins: 3 and 4 from a point; 6 and 7 from a point; cell closed; trapezoidal, with a very oblique and scarcely

indented apical margin; grey with grey cilia.

Abdomen and legs grey.

Expl. al. 8 millim.

Hab. West Indies—St. Vincent (windward side, 2 specimens, Smith).

Type, 3.

GELECHIA, sp., Snell.

Gelechia, sp., Snell. Tijd. v. Ent. xxx. p. 66 (1887).

West Indies-Curação (Snell.).

GELECHIA? sp., Snell.

Gelechia? sp., Snell. Tijd. v. Ent. xxx. p. 66 (1887).

West Indies—Curação (Snell.).

Вкуоткорна, Неіп.

BRYOTROPHA TRANSLUCIDA, sp. n.

Antennæ pale cinereous, faintly speckled with fuscous. Palpi cinereous; apical joint speckled with fuscous.

Head cinereous.

Thorax cinereous, with a slight ochreous tinge.

Fore wings deep brownish fuscous, the extreme base subochreous; with a broad oblique fascia across the middle of the wing, sub-ochreous mottled with brownish; a few subochreous spots about the costal and dorsal margins before the apex; cilia greyish.

Hind wings semitransparent, iridescent greyish; cilia grey. Abdomen greyish fuscous, faintly barred with paler colour.

Legs pale greyish ochreous.

Exp. al. 12-14 millim.

Hab. West Indies—St. Vincent (windward side, 3 specimens, Smith); Dominica (1 specimen, Druce).

Type, \mathfrak{P} .

BRYOTROPHA, sp.?

West Indies-St. Vincent (1 specimen, Smith).

Allied to translucida, but in too poor condition to be described.

LITA, Tr.

LITA CROCIPUNCTELLA, sp. n.

Antennæ dark umber, very faintly annulated.

Palpi dark umber, with the apex of the second joint and the [30]

extreme apex of the apical joint whitish ochreous, a few whitish-ochreous scales interspersed at the sides.

Head dark umber-brown, mixed with a few hoary scales.

Thorax dark umber, sprinkled with hoary scales and fringed

with hoary scales posteriorly.

Fore wings dark umber, irrorated with pale ochreous scales and sprinkled with orange-vellow spots, some of which are faintly margined with raised blackish scales; the arrangement of the spots is somewhat as follows:—one at the base below the costal margin; two on the fold, each followed by black scales; one on the middle of the wing and one beyond it towards the end of the cell, brighter and more conspicuous and followed by raised blackish scales; at one fourth from the apex, a large orange-yellow spot on the costal and an opposite one on the dorsal margin, with one small spot at the extreme apex; cilia dark umber-grey on the dorsal margin.

Hind wings brownish grey; cilia greyish.

Abdomen dark umber; anal tuft bright ochreous.

Legs very pale greyish ochreous, barred and banded with brownish fuscous.

Exp. al. 12 millim.

Hab. West Indies—St. Vincent (windward side, 1 specimen, Smith).

Type, \mathfrak{P} .

PŒCILIA, Hein.

PŒCILIA EXTRANEA, sp. n.

Antennæ [broken], a black line along each side of the basal joint, which is otherwise white.

Palpi with long projecting divided scales beneath the second joint, whitish on the inner side, streaked with brown and chestnut on the outer side; apical joint distinctly barred with black near the base and towards the apex.

Head and face white.

Thorax cinereous, mottled with brownish fuscous at the sides

and posteriorly.

Fore wings brownish fuscous at the base for one third their length, cinereous speckled with brownish fuscous beyond, much shaded with brownish fuscous on the apical fourth; a slender white line commencing at the base and following the costal margin is bent downwards and forms a sinuous outer edge to the basal patch, reaching the dorsal margin obliquely before the middle; another slender white line commencing below the middle of the costa is sinuated outwards and downwards to the anterior edge of the dark apical fourth, where it meets a shorter, slender white line, which reverts obliquely to the dorsal margin; along the extreme apical margin is a narrow whitish line enclosing a short series of black dots; cilia pale cinerous, with a reduplicated darker line running through them, cilia on the dorsal margin grey.

Hind wings grey; cilia grey.

Abdomen greyish.

Legs very pale cinereous; hind tibiæ very pale cinereous, shaded with brownish fuscous externally; posterior tarsal joints fuscous, dotted with white; spurs pale cinereous; the middle pair of legs are blackish, with slender white oblique lines on their outer sides.

Exp. al. 10 millim.

Hab. West Indies—St. Vincent (May, 1 specimen, Smith). Type, 3.

DIDACTYLOTA, nom. n.

 $(\delta is = twice; \delta \alpha \kappa \tau_{v}^{\upsilon} \lambda \omega \tau \delta s = fingered.)$

= § Dactylota, Snell. Tijd. v. Ent. xix. pp. 23-7 (1876).

Type, ♂♀ Dactylota kinkerella, Snell.

The name Dactylota, given by Snellen to this genus, being preoccupied by Brandt in the Echinodermata (1835), I have thought it desirable to change it to Didactylota, a name which if read in a certain sense is sufficient to indicate its origin, but which equally applies to the structure of the genus.

DIDACTYLOTA BICOLOR, sp. n.

Antennæ pale fawn.

Palpi very pale fawn.

Head and thorax rich fawn-brown.

Fore wings rich fawn-brown to very near the middle, beyond fuscous speckled with pale cinereous; the margin of the two colours is straight and distinct across the wing, but with no dividing-line; cilia pale cinereous, with a line of fuscous scales along their middle.

Hind wings pale greyish fuscous; cilia long, purplish grey.

Abdomen fuscous, pale cinereous beneath; the protruding anal claspers white.

Legs pale cinereous, with long grevish hairs on the hind tibiæ above, projecting over the spurs; hind tarsal joints barred with fuscous.

Exp. al. $7\frac{1}{2}$ millim.

Hab. West Indies—St. Vincent (windward side, 1 specimen, Smith).

Type, 3.

This is the third species of the genus now known. The hind wings distinctly divided to one fourth into two separate lobes, seems to justify its position. In a single specimen I am unable to examine critically the neuration, but it appears to be in all respects similar to kinkerella; the wings, however, owing to their very long and closely packed cilia, have a squarer appearance, which makes them took wider in proportion to their length; this, however, is not the case when the shape of the wing itself is examined. In this and the American species (snellenella, Wlsm.) the second lobe of the hind wings is somewhat more decidedly developed than in the European type.

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TACHYPTILIA, Hein.

TACHYPTILIA DESECTELLA, Z.

Gelechia (Tachyptilia) desectella, Z. Hor. Soc. Ent. Ross. xiii. pp. 362-3, pl. v. fig. 122 (1877).

West Indies—Cuba (Z.).

HELCYSTOGRAMMA, Z.

HELCYSTOGRAMMA OBSERATELLA, Z.

Gelechia (Helcystogramma) obseratella, Z. Hor. Soc. Ent. Ross. xiii. pp. 371-3, pl. v. fig. 127 (1877).

West Indies—Cuba (Z.).

TRICHOTAPHE, Clem.

TRICHOTAPHE TRIGONELLA, sp. n.

Antennæ brownish fuscous, faintly annulated with paler rings.

Palpi pale whitish ochreous, the extreme point of the apical joint ochreous, with a few fuscous scales preceding it.

Head leaden grev.

Thorax greyish brown, with a distinct whitish-ochreous line from the eyes to the middle of the posterior margin on each side, forming

a V-shaped mark, which gives it a triangular appearance.

Fore wings greyish brown, with a small ferruginous spot at the end of the discal cell, margined on its upper and outer side with whitish-ochreous scales; a whitish-ochreous line from the base along the dorsal margin to the bulge of the wing, but not continued where the margin becomes straight; a faint whitish-ochreous spot or group of scales on the extreme costal margin at one fifth from the apex; cilia brownish grey, with a few detached whitish-ochreous scales along their apical margin.

Hind wings brownish grey, with a tuft of greyish-ochreous hairs above at the base; cilia brownish grey, inclining to ochreous

at their extreme base.

Abdomen greyish brown; anal tuft whitish ochreous.

Legs whitish ochreous; hind tibiæ lightly touched with brownish grey above the spurs and on the tarsal joints.

Exp. al. 11 millim.

Hab. West Indies—St. Vincent (windward side, 1 specimen, Smith).

Type, 3.

BRACHYCROSSATA, Hein.

Brachycrossata psoricopterella, sp. n.

Antennæ fuscous, faintly annulated with pale cinereous.

Palpi fuscous, speckled with pale cinereous at the ends of the second and apical joints.

Head greyish fuscous above, face paler.

Thorax fuscous.

Fore wings mottled with pale cinereous and fuscous in about equal proportions; the latter predominating along the dorsal half to the

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anal angle and in two costal patches, the first scarcely before, the the other beyond the middle; there is also a fuscous streak from the costa near the base, and a fuscous spot at the extreme apex followed by a fuscous line around the apical margin but not reaching to the anal angle; cilia reddish grey, inclining to pale ochreous grey on their basal half, especially towards the costal margin. In some specimens the pale ground-colour is equally distributed over the dorsal half of the wing.

Hind wings dark greyish; cilia grey.

Abdomen fuscous, anal tuft paler; underside shining pale cinereous.

Legs: hind legs fuscous, tibiæ clothed above with longish hairs, tarsal joints speckled with very pale ochreous; middle pair of legs conspicuously banded on their outer sides with fuscous and very pale ochreous.

Expl. al. 10 millim.

Hab. West Indies—St. Vincent (windward side, 5 specimens, Mav, Smith).

Type, 3.

DIASTOMA, Mschl.

Diastoma squamosa, sp. n.

Antennæ, &, strongly ciliated; very pale brownish.

Palpi whitish, with an umber-brown streak at the base on the underside.

Head dirty whitish.

Thorax whitish, with a slight umber-brown tint anteriorly.

Fore wings white; faintly speckled with pale umber-brown; with three dark brown costal marks containing some blackish scales:—the first at one fourth from the base, giving rise to a very inconspicuous sinuate and outwardly oblique line of brownish scales, some of which are raised; the second at about the middle of the wing, also gives rise to an outwardly oblique line of brown scales containing raised blackish tufts, this is developed into a conspicuous spot at the end of the cell, and beneath it nearer to the base is a much smaller spot of similar raised scales, this line is not continued to the dorsal margin; from the third costal spot, which is at three fourths of the winglength, a more continuous but slender line of mixed brown and black scales, some slightly raised, curves outwards above the middle of the wing and is bent back to the anal angle; beyond it, but below the middle of the apical margin, is a spot of similar colour, above which are a few scattered brownish scales along the margin; cilia whitish, their base indicated by a very faint marginal line.

Hind wings yellowish white, with cilia of the same colour.

Abdomen very pale ochreous, with two yellowish-white tufts arising right and left at its junction with the thorax.

Legs yellowish white. Exp. al. 19 millim.

Hab. West Indies—St. Vincent (1 specimen, Smith).

Type, 3.6

POLYHYMNO, Chamb.

POLYHYMNO? GODMANI, sp. n.

Antennæ with the basal joint slightly enlarged; pale grey.

Palpi shining pale grey.

Head shining pale grey; face almost white.

Thorax shining pale grey.

Fore wings shining pale reddish grey, without markings to beyond the middle; the apical portion of the wing adorned, first by a bright orange-yellow streak slightly above the middle of the wing extending to the costal margin before the apex as far as a small jet-black apical spot, from which two slender dark lines (which appear to be produced by the iridescent effect of the waved lines of scales rather than by any dark scaling) diverge downwards to the anal angle, these are preceded by a bright silvery-white space which runs obliquely backwards (and appears to be also dark-margined), and followed by the shining lilac metallic cilia, which are gathered into two distinct depressed points at the apex, giving the wing a falcate appearance; the cilia of the dorsal margin and anal angle are reddish grey.

Hind wings shining pale grey; cilia purplish grey, with a distinct black transverse line preceded by a pale space at the extreme

apex.

Abdomen shining leaden grev.

Legs very pale ochreous, with a black spot above the spurs; hind tibiæ clothed with long nairs above; hind tarsal joints barred with blackish scales above.

Exp. al. 11 millim.

Hab. West Indies—St. Vincent (Kingstown and windward side, 5 specimens, Smith).

Type, J.

Additional material should enable this species to be ultimately separated from the genus *Polyhymno*; it agrees in structure with my African *Polyhymno*? tenuis and also with Walker's Gelechia animosella from India.

YPSOLOPHUS, F.

YPSOLOPHUS MANELLUS, Mschl.

Ypsolophus manellus, Mschl. Ab. Senck. Nat. Ges. xv. pp. 344-5, 354 (1890).

West Indies-Portorico (Mschl.).

YPSOLOPHUS RUSTICUS, sp. n.

Antennæ pale greyish ochreous.

Palpi with a strong triangular tuft, from the middle of which arises the sharp, slender, apical joint; cinereous at the sides, with a paler line along the margin of the tuft.

Head pale greyish ochreous.

Thorax pale ochreous.

Fore wings pale ochreous, with a small fuscous spot at the extreme base of the costal margin and a black discal dot at half the wing-length, followed by a second at two thirds from the base, somewhat nearer the dorsal margin, beneath it is a group of brownish-fuscous scales; one or more groups of fuscous scales on the costal margin before the apex, and a diffused shade of the same colour along the apical margin tapering to the anal angle; cilia pale ochreous.

Hind wings pale greyish with a slight iridescence; cilia pale cinereous.

Abdomen greyish; anal tuft inclining to ochreous.

Legs very pale cinereous.

Exp. al. 12 millim.

Hab. West Indies—St. Vincent (windward side, 2 specimens, Smith). United States—Texas (Belfrage).

Type, J.

I have two specimens collected by the late G. W. Belfrage in Texas, which have been long in my collection as belonging to an undescribed species, but under the suspicion that they might be *Anarsia trimaculella*, Chamb., from which they appear to differ in the absence of a third spot on the fold before the middle.

YPSOLOPHUS PIPERATUS, sp. n.

Antennæ pale cinereous.

Palpi fuscous externally, paler on their inner sides, with a narrow whitish line along the outer margin of the tuft.

Head pale cinereous.

Thorax pale ochreous.

Fore wings pale ochreous, dusted with black scales, especially on the outer half; costa black at the base, dotted unequally with black throughout; apical margin dusted with black; a black di-cal spot at one fourth from the base above the fold; a second smaller one below it; two black dots towards the end of the cell, the first of which is at about the middle of the wing, the second beyond the middle, below the first of these spots is a small black dot; cilia very pale ochreous.

Hind wings grey with a faint iridescence; cilia pale cinereous.

Abdomen grey.

Legs pale cinereous.

Exp. al. 9 millim.

Hab. West Indies—St. Vincent (windward side, one specimen, Smith).

Type, 3.

YPSOLOPHUS INDIGNUS, sp. n.

Antennæ pale cinereous, faintly annulated.

Palpi rufo-cinereous, with a pale line along the upper margin of the second joint.

Head and thorax pale rufo-cinereous.

Fore wings pale rufo-cinerous, with a few chestnut mottlings in [36]

some specimens; a blackish discal spot before the middle, another on the fold almost exactly below it, but perhaps a little further removed from the base; a pair of very inconspicuous chestnut-brown spots on each side of the fold near the base, the lower preceding the upper, and another pair at about the end of the cell, sometimes fused into one spot but not conspicuous; a series of five small black triangular dots—three on the apical margin, one on the apex, and one above it; cilia pale rufo-cinereous.

Hind wings reddish grey; cilia grey.

Abdomen greyish; anal tuft slightly paler.

Legs pale cinereous; tarsal joints faintly spotted.

Exp. al. 11 millim.

Hab. West Indies—St. Vincent (Kingstown and windward side, 6 specimens, Smith).

Type, J.

This appears to be a variable species. The spots are almost obsolete in some specimens, which then appear almost uniform. It is closely allied to Y. pauciguttellus, Clem., but is scarcely more than half the size, the hind wings are also somewhat less transparent.

ECOPHORINA.

PSECADIA, Hb.

N. Syn. = Tamarrha, Wkr. Cat. Lp. Ins. B. M. xxix. p. 816 (1864).

PSECADIA CONFUSELLA, Wkr.

Hyponomeuta confusellus, Wkr. Cat. Lp. Ins. B. M. xxviii. p. 531 (1863).

N. syn. = Cryptolechia strigosella, Wkr. Cat. Lp. Ins. B. M. xxix.

p. 710 (1864).

Psecadia (Cryptolechia) strigosa, Ckrl. Jr. Inst. Jamaica, i. 33 (1891).

West Indies—Jamaica (Wlsm.), San Domingo (Wkr.), Dominica (Wlsm.).

Colombia—Bogotá (Wlsm.).

This species, which was placed in the genera Hyponomeuta and Cryptolechia by Walker, should be removed to Psecadia. I have specimens from Dominica and Bogotá received from Mr. Druce.

PSECADIA INGRICELLA, Mschl.

Psecadia ingricella, Mschl. Ab. Senck. Nat. Ges. xv. pp. 343, 354 (pl.), fig. 19 (1890).

West Indies—Portorico (Mschl.), Jamaica (Wlsm.).

PSECADIA PAUCELLA, Wkr.

Hyponomeuta paucellus, Wkr. Cat. Lp. Ins. B. M. xxviii. pp 530-1 (1863).

West Indies—San Domingo (Wkr.).

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PSECADIA NOTATELLA, Wkr.

Psecadia notatella, Wkr. Cat. Lp. Ins. B. M. xxviii. p. 536 (1863). N. syn. = Psecadia xanthorrhoa, Z. Hor. Soc. Ent. Ress. xiii. pp. 234-6, pl. iii. fig. 71 (1877); Snell. Tijd. v. Ent. xxx. p. 65 (1887); Mschl. Ab. Senck. Nat. Ges. xv. pp. 341, 354 (1890).

West Indies—San Domingo (Wkr.), Portorico (Z.), Curação (Snell.).

PSECADIA ABRAXASELLA, Wkr.

Psecadia abraxasella, Wkr. Cat. Lp. Ins. B. M. xxx. pp. 1016-17 (1864).

N. syn. = $Psecadia\ aureoapicella$, Mschl. Ab. Senck. Nat. Ges. xv. pp. 341-2, 354 (1890).

West Indies—San Domingo (Wkr.), Portorico (Mschl.), Jamaica (Wlsm.).

PSECADIA ADUSTELLA, Z.

Psecadia adustella, Z. Hor. Soc. Ent Ross. xiii. pp. 240-1 (1877).

West Indies—Portorico (Z.).

PSECADIA EXORNATA, Z.

Psecadia exornata, Z. Hor. Soc. Ent. Ross. xiii. pp. 238-240, pl. iii. fig. 73 (1877).

Peru—Chauchamayo (Z.). West Indies—Cuba (Z.).

PSECADIA KIRBYI, Mschl.

Psecadia kirbyi, Mschl. Ab. Senck. Nat. Ges. xv. pp. 342-3, 354 (1890).

West Indies-Portorico (Mschl.).

' PSECADIA GELIDELLA, Wkr.

Tamarrha gelidella, Wkr. Cat. Lp. Ins. B. M. xxix. p. 817 (1864). West Indies—Jamaica (Wkr.).

PSECADIA NIVOSELLA, Wkr.

Tamarrha nivosella, Wkr. Cat. Lp. Ins. B. M. xxix. p. 817 (1864). West Indies—Jamaica (Wkr.), San Domingo (Wkr.).

A TYCHIANÆ.

TORTYRA, Wkr.

Tortyra, Wkr. Cat. Lp. Ins. B. M. xxviii. p. 510 (1863).

N. syn. = Choregia (Z.), F. & R. Reise Nov., Lp. expl. pl. cxl. (1875); Z. Hor. Soc. Ent. Ross. xiii. pp. 191-2 (1877).

TORTYRA AURIFERALIS, Wkr.

Tortyra auriferalis, Wkr. Cat. Lp. Ins. B. M. xxviii. pp. 510-511 (1863).

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N. syn.=Simæthis aurofasciana, Snell. Tijd. v. Ent. xviii. pp. 73, 74-76, pl. vi. fig. 7 (1875); Mschl. Ab. Senck. Nat. Ges. xv. pp. 335, 354 (1890).

Simæthis (Chordates) aurofasciana, Snell. Tijd. v. Ent. xx. pp. 48-

49 (1876).

Choregia aurofasciana, Snell. Tijd. v. Ent. xxviii. p. 15 (1885). N. syn. = Choregia ignita, Z. Hor. Soc. Ent. Ross. xiii. pp. 195-6 (1877).

West Indies—San Domingo (Wkr.), St. Martin (Snell.), Cuba (Z.), Portorico (Mschl.), St. Vincent (windward side, sea-level, 2 speci-

mens, Smith).

It is, I think, more than probable that Tortyra spectabilis, Wkr. (Brazil), and Choregia fulgens, F. & R. (Colombia), are also varieties of this species; indeed, Zeller indicates the same opinion in naming Choregia ignita under his remarks on Choregia fulgens, and not under a separate heading. The differences appear to be the generally brighter colouring of the thorax and fore wings, and the small longitudinal black streaks running towards the apex of the wing in the West-Indian form.

GAURIS, Hb.

GAURIS BIFERANA, WKr.

Gauris biferana, Wkr. Cat. Lp. Ins. B. M. xxviii. p. 418 (1863). West Indies—San Domingo (Wkr.).

GAURIS RIMULALIS, Z.

Simæthis rimulalis, Z. Ver. z.-b. Ges. Wien, xxv. p. 321 (1875); Hor. Soc. Ent. Ross. xiii. pp. 174-5, pl. ii. fig. 62 (1877).

West Indies—St. Thomas (Z.), Cuba (Z.).

CHOREUTINÆ.

BRENTHIA, Clem.

Brenthia pavonacella, Clem.

Brenthia pavonacella, Clem. Proc. Ac. Nat. Sc. Phil. xii. p. 172 (1860); Stn. Tin. N. Am. pp. 38, 41, 134-5 (1872); Mschl. Ab. Senck. Nat. Ges. xv. pp. 335, 354 (1890).

United States, Central America, Brazil. West Indies—Portorico (Mschl.).

GLYPHIPTERYGINÆ.

TRAPEZIOFHORA, gen. nov.

 $(\tau \rho \ddot{\alpha} \pi \acute{\epsilon} \zeta_{10} \nu = \text{an irregular four-sided figure}; \phi \rho \rho \epsilon \hat{\imath} \nu = \text{to bear.})$

Type, ♂♀ Trapeziophora gemmula, Wlsm.

Antennæ about half the length of the fore wings; simple in both sexes.

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Maxillary palpi obsolete.

Labial palpi short, projecting, scarcely recurved; apical joint longer than the second joint.

Haustellum moderate.

Head smooth.
Thorax stout.

Fore wings elongate, subovate, costa somewhat arched beyond the middle, apex rounded, apical margin oblique, rounded. Neuration: 12 veins, all separate; 7 and 8 closely approximate at their base; 9 remote from 8; 10 very near 9, and approaching it even more closely where it reaches the costal margin.

Hind wings trapezoidal, of even width throughout, dorsal margin slightly concave, apex rounded, apical margin convex. Neuration: 8 veins; 3 and 4 from a point; 6 and 7 separate, but approximate

towards their base.

Abdomen somewhat stout.

Legs smooth, spurs unequal.

This genus differs from the ordinary forms of the Glyphipteryginæ in having smooth (not hairy) legs, and in the form of the hind wings, which is trapezoidal, but in other respects it appears to fall into the neighbourhood of Aelocosma, Meyr.

Trapeziophora gemmula, sp. n. (Plate XLI. fig. 7, a-b.)

Antennæ fuscous.

Palpi whitish, doubly barred with black across the second joint and with a black longitudinal line throughout the length of the apical joint beneath.

Head purplish fuscous. Thorax greyish fuscous.

Fore wings greyish fuscous at the base, blending into bright purple on the apical half of the wing; the basal half irrorated with small whitish shining dots, which run in a series of confused lines, radiating outwards from the base to the middle of the wing; a few similar dots, but of a rather yellower colour, are visible about the middle of the bright purple apical half of the wing; upon this outer half are four distinct shining iridescent metallic bands, with a lilac or green reflexion—the first commencing on the costa, just beyond the middle of the wing, is widened and diffused downwards, but not reaching to the lower margin of the cell; the second is shorter, with a slightly oblique outward direction, and is more remote from the first than are the two beyond it from itself or each other; the third band, commencing on the costa and curving obliquely outwards, is recurved below the middle to the anal angle; beyond it a short fourth band crosses before the apex from the costa to the middle of the apical margin; cilia grevish about the apex, tending to purplish grey about the anal angle. Underside unicolorous purplish fuscous.

Hind wings brown; cilia greyish brown. Underside greyish brown, with three bright metallic transverse streaks near the apex.

Abdomen greyish fuscous; dingy whitish beneath.

Legs banded with black and white.

Exp. al. 11 millim.

Hab. West Indies-St. Vincent (windward side, 2 specimens, Smith).

Type, $3 \circ 1$.

XYLORYCTINÆ.

GLYPHIDOCERA, gen. n.

 $(\gamma \lambda \tilde{\nu} \phi is = a \text{ notch}, \kappa \epsilon \rho as = a \text{ horn.})$

Type, $\mathcal{F} \subseteq G/y$ phidocera audax, Wlsm.

Antennæ: male, slightly serrate, deeply notched on the upperside a little beyond the basal joint; female, simple, having no notch, but the outer end of the basal joint is somewhat enlarged.

Maxillary palpi obsolete.

Labial palpi long, recurved, clothed with closely appressed scales; apical joint acuminate, rather more than half the length of the second joint.

Head densely clothed above; face smooth.

Thorax smooth.

Fore wings narrow, elongate, depressed, and rounded at the apex, slightly arched at the extreme base of the costa, costal and dorsal margins parallel, anal angle rounded. Neuration: 11 veins; 2 and 3 from a recurved common stem; 7 closely approximate to 8 at base,

running to apical margin below apex, 8 to costal margin.

Hind wings more than twice the breadth of the fore wings, slightly rounded at the apex, outer margin evenly rounded to the abdominal angle; cilia short and even. Neuration: 8 veins; 3 and 4 from a short common stem; 5 straight, moderately remote from origin of 3+4; 6 and 7 from a common stem; 8 joined to upper margin of cell by a cross vein.

Legs: posterior pair with unequal spurs; tibiæ moderately

clothed.

It seems at present impossible to arrive at the affinities of this genus; the notched antennæ would suggest Blastobasis, Z., and Holcocera, Clem., from which it differs widely in neuration and the shape of the hind wings. Its neuration conforms to the Xyloryctidæ, Meyr., from which it is separated by the absence of a tuft of hairlike scales near the base of the hind wings; nevertheless it will be excusable perhaps to place it in this family, at least provisionally.

GLYPHIDOCERA AUDAX, sp. n. (Plate XLI. fig. 8, a-c.)

Antennæ subochreous.

Palpi fawn-brown, dusted with fuscous.

Head and thorax fawn-brown.

Fore wings dull fawn-brown, densely irrorated with fuscous scales throughout; with an elongate transverse fuscous spot before the middle, of which the lower extremity touches the fold; a smaller fuscous spot at the end of the cell; a few fuscous scales about the apical margin indicate the extremities of the veins; cilia pale fawnbrown, with a darker line along their middle.

Hind wings cinereous, with a slight fawn-brown shade from the base above their middle; a narrow inconspicuous subfuscous band across the extreme apex; cilia cinereous, with a slender paler line along their base.

Abdomen cinereous.

Legs pale cinereous; hind tarsal joints unspotted.

Exp. al. 16 millim.

Hab. West Indies—St. Vincent (windward side, 2 specimens, Smith).

Type, $3 \circ 2$.

HYPONOMEUTINÆ.

HYPONOMEUTA, Z.

HYPONOMEUTA MAHALEBELLUS, Gn.

Yponomeuta mahalebella, Gn. Ind. Meth. p. 105 (1845); id. Ann. Soc. Ent. Fr. (5 s.) ix. p. 282 (1879).

Hyponomeuta mahalebellus, Stgr. & Wk. Cat. Lp. Eur. (ii.) no. 1555, p. 277 (1871).

Europe.

West Indies—Cuba (Gn.).

HYPONOMEUTA TRIANGULARIS, Mschl.

Hyponomeuta triangularis, Mschl. Ab. Senck. Nat. Ges. xv. pp. 339-40, 354 (1890).

West Indies-Portorico (Mschl.).

Œта, Grt.

ŒTA PUNCTELLA, Cram.

Phalæna (Tinea) punctella, Cram. Pap. Exot. iv. p. 164, pl. ccclxxii. fig. L (1782).

= Œta compta, Grt. Proc. Ent. Soc. Phil. v. pp. 230-1 (1865). = Scintilla pustulella, Gn. Ann. Soc. Ent. Fr. (5 s.) ix. pp. 287-8 (1879); Berg, Ann. Soc. Ci. Argent. x. pp. 100-2 (1880).

Œta punctella, Z. Ver. z.-b. Ges. Wien, xxiii. pp. 228-9 (1873).

Larva: Ailanthus glandulosa.

United States, Honduras, Surinam, French Guiana, Argentine Republic, Brazil.

West Indies—Trinidad (W/sm.).

I have a specimen from Trinidad received from Mr. Crowfoot. Walker [Cat. Lp. Ins. B. M. xxxv. p. 1894 (1866)] records this species from India, thus:—"c. Himalaya Mts. Presented by the Entomological Club." This specimen is labelled "Honduras"!

ŒTA FULVIGUTTELLA, Z.

Œta fulviguttella, Z. Ver. z.-b. Ges. Wien, xxiii. pp. 231-2(1873). = Syblis glaucopidella, Gn. Ann. Soc. Ent. Fr. (5 s.) ix. p. 259 (1879); Berg, An. Soc. Ci. Argent. x. pp. 106-7 (1880).

(? Australia, Z.)

West Indies—Jamaica (Gn.).

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ŒTA FASTUOSA, Z.

Œta fastuosa, Z. Hor. Soc. Ent. Ross. xiii. pp. 225-7, pl. iii. fig. 68 (1877); Berg, An. Soc. Ci. Argent. x. p. 109 (1880).

West Indies—Cuba (Z.).

ŒTA SIDEREA, Sp. n.

Antennæ slightly serrate; grey-brown.

Palpi blackish, with a white ring around the junction of the second and apical joints.

Head white above, face with a black cross band.

Thorax purplish in front and behind, with a large shining goldenyellow patch on each side (possibly joined in the middle, where my

specimen is pinned); tegulæ shining golden-grey.

Fore wings purplish blue, a golden-yellow spot at the extreme base scarcely separated from the costal margin; beyond it an elongate spot of the same colour reaching to two thirds of the winglength; a round golden-yellow spot on the middle of the dorsal margin, with a smaller one above and beyond it; beneath the costal margin a broad sinuate golden-yellow band from immediately before the apex reaches to the anal angle, leaving the apical margin of the purplish ground-colour, which is profusely irrorated throughout with round snow-white spots; cilia purplish grey. Underside brownish grey.

Hind wings brownish grey, semitransparent, with a strong iridescent sheen, especially about the middle. Underside brownish

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Abdomen brownish grey, a series of paler spots along its upper side.

Legs purplish grey barred with white.

Exp. al. 19 millim.

Hab. West Indies-San Domingo.

Type, Q Mus. Wlsm.

This specimen was kindly given me by Dr. Fernald in 1884.

EUARNE, Mschl. & Saalm.

EUARNE OBLIGATELLA, Mschl.

Euarne obligatella, Mschl. Ab. Senck. Nat. Ges. xv. pp. 340, 354 (1890).

West Indies—Portorico (Mschl.).

TRICHOSTIBAS, Z.

TRICHOSTIBAS CALLIGERA, Z.

Trichostibas calligera, Z. Hor. Soc. Ent. Ross. xiii. pp. 231-2 (1877).

West Indies—Cuba (Z.).

TRICHOSTIBAS OVATA, Z.

Trichostibas ovata, Z. Hor. Soc. Ent. Ross. xiii. p. 233 (1877). West Indies—Cuba (Z.).

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TRICHOSTIBAS SORDIDATA, Z.

Trichostibas sordidata, Z. Hor. Soc. Ent. Ross. xiii. pp. 233-4 (1877).

West Indies—Portorico (Z.).

TRICHOSTIBAS? IOPHLEBIA, Z.

Trichostibas iophlebia, Z. Hor. Soc. Ent. Ross. xiii. pp. 228-9, pl. iii. fig. 69 (1877).

West Indies—Antilles (Z.).

If the neuration, which is partly given in the figure, is correct, this species cannot be a *Trichostibus*, but must be allied to *Cydosia nobilitella*, Cram., the type of Smith's *Cydosiinæ*, which would necessitate its removal from the *Tineidæ*.

BUTALINÆ.

Auximobasis, gen. nov.

 $(a\ddot{v}\xi i\mu\sigma s = \text{promoting growth}; \beta a\sigma \iota s = \text{the base.})$

'a ype, $\mathcal{F} \supseteq Auximobasis persimilella, Wlsm.$

Antennæ with the basal joint enlarged, flattened, not notched, with a small pecten in front.

Maxillary palpi small.

Labial palpi smooth, recurved to the top of the head; apical joint slender, more than half the length of the second joint.

Haustellum scaled.

Head smooth.

Thorax stout, smooth.

Fore wings elongate, lanceolate, slightly rounded at the apex, costal margin nearly straight, dorsal margin bulged at the base, straight beyond. Neuration: 12 veins; 2, 3, and 4 very short; 7 and 8 form a common stem to above apex.

Hind wings nearly as wide as the fore wings; lanceolate, tapering outwards, widest at the abdominal margin; cilia long. Neuration: 8 veins; 3 from the lower angle of cell, 4 and 5 forked out of 3 from near its base; 6 and 7 separate.

Legs: hind tibiæ densely clothed.

Auximobasis persimilella, sp. n. (Plate XLI. fig. 9, a-c).

Antennæ cinereous, basal joint hoary.

Palpi cinereous, stained with fuscous externally nearly to the apex of the second joint.

Head hoary cinereous.

Thorax hoary cinereous.

Fore wings hoary cinereous, sprinkled with fuscous scales; an ill-defined slightly cutcurved fuscous band scarcely before the middle of the wing from the costal to the dorsal margin; a pair of fuscous

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dots beyond the end of the cell, and a slight angulated fuscous shade before the apex running parallel to the margin of the wing (in some specimens these markings are almost obsolete); cilia cinereous.

Hind wings greyish; cilia cinereous.

Abdomen cinereous, faintly banded with a deeper shade.

. Legs: hind tibiæ fuscous, externally clothed above with pale cinereous hairs; spurs and tarsal joints pale cinereous.

Exp. al. 10-12 millim.

Hab. West Indies—St. Vincent (Kingstown, 2 specimens; windward side, 6 specimens, Smith).

Type, $3 \circ 2$.

In markings this species is scarcely distinguishable from a small specimen of Blastobasis phycidella, Z., but the absence of an antennal notch and the neuration of the hind wings at once distinguish it. It is the only form allied to Blastobasis that I have yet met with in which veins 3 and 4 of the hind wings proceed from a stalk out of 3 instead of coming direct from the edge of the cell; the whole group is an exceedingly difficult one, and the multiplication of genera founded on good structural differences, however slight, can only facilitate their future classification, especially as the species are at least as difficult to separate by pattern and markings as are the genera.

HELIODININA.

HELIODINES, Stn.

Heliodines marginata, sp. n.

Antennæ simple, as long as the fore wings; sooty brown.

Palpi short, slender, dependent; sooty brown.

Head and thorax sooty brown; underside of the thorax with a

conspicuous orange yellow spot on each side.

Fore wings shining orange-yellow, very narrowly margined throughout with sooty brown, which is diffused over the extreme apex; a single lilac shining metallic spot lies on the costal margin near the base; there are two slender, but by no means conspicuous, streaklets of the same colour—one along the base of the cilia about the region of the anal angle, the other much shorter, above and parallel to it, forming a short tooth-like projection inwards from the middle of the suffused dark apical portion of the wing; cilia sooty brown. Underside unicolorous greyish brown.

Hind wings deep brown; cilia sooty brown. Underside unicolor-

ous greyish brown.

Abdomen and legs sooty brown.

Exp. al. 8 millim.

Hub. West Indies—St. Vincent (windward side, 1 specimen, Smith).

Type, 3.

COSMOPTERYGINÆ.

Cosmopteryx, Hb.

Cosmopteryx lespedezæ, Wlsm.

Cosmopteryx lespedezæ, Wlsm. Tr. Am. Ent. Soc. x. p. 198 (1882).

Larva on Lespedeza (in U.S., Wlsm.).

United States—Texas, N. Carolina.

West Indies—St. Vincent (Kingstown and windward side, 4 specimens, Smith).

COSMOPTERYX (? GEMMIFERELLA, Clem.), Mschl.

Cosmopteryx gemmiferella, Clem. Proc. Ac. Nat. Sc. Phil. xii. p. 10 (1860); Stn. Tin. N. Am. pp. 39, 100-1 (1872).

Cosmopteryx (? gemmiferella, Clem.), Mschl. Ab. Senck. Nat.

Ges. xv. pp. 345, 354 (1890).

Larva on Zizania miliacea, April and June (in U.S., F. & B.). United States—Texas, Pennsylvania. West Indies—Portorico (Mschl.).

COSMOPTERYX SANCTI-VINCENTII, sp. n.

Antennæ brown, with a slender white line along each side reaching to a white ring around the eighth joint from the apex; apical joint white.

Palpi brownish, with slender whitish lines throughout their

length above and beneath.

Head brown.

Thorax brown, with a slender longitudinal central white streak.

Fore wings brown to a little beyond the middle, apex brown, separated from the basal half by a broad pale yellow band; on the basal half are four distinct slender white longitudinal lines—the first along the costal margin from the base to the yellow band, sometimes slightly interrupted about its middle; a second from near the base above the fold parallel with the first and about two thirds its length; a third below the outer half of the fold, short, commencing at one half the length of the brown basal half and not reaching the yellow band; a fourth along the dorsal margin reaching to a point opposite the commencement of the third; the brown basal half is bordered obliquely by two spots of raised pale golden scales, sometimes connected, the upper spot being slightly nearer to the base than the lower one, at the outer edge of the upper spot is a minute dot of jet-black scales; at the outer edge of the broad yellow band are two opposite pale golden spots, the one costal, the other, which is the larger, dorsal; between these spots the yellow colour of the band is continued for a small space and emits into the brown apical part of the wing a slender straight golden-yellowish line to the extreme apex; a few whitish scales on the costa form an outer margin to the second pale golden-yellow costal spot; cilia greyish brown.

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Hind wings greyish brown, cilia the same.

Abdomen brownish cinereous, pale beneath.

Legs brownish, spotted on the spurs and tarsal joints with silvery white.

Exp. al. 10 millim.

Hab. West Indies—St. Vincent (Kingstown and windward side, 2 specimens, Smith).

Type, $3 \circ 1$.

LAVERNINÆ.

ANYBIA, Stn.

Anybia conspersa, sp. n.

Antennæ with the basal joint somewhat enlarged outwardly; greyish fuscous, the last eight or nine joints at the apex whitish ochreous.

Palpi recurved to above the base of the antennæ; apical and second joints about equal in length; dark fuscous, externally delicately stippled with cinereous scales.

Head greyish fuscous; face pale cinereous.

Thorax greyish fuscous, speckled with pale cinereous, especially at the sides.

Fore wings narrow, elongate, tapering, acuminate, with long cilia; cinereous, thickly clouded and sprinkled with fuscous; a slight chestnut-brown shade near the base, adjacent to but below the fold; a few chestnut scales also above the fold halfway to the costal margin; dorsal margin thickly clouded with fuscous throughout; a small fuscous dot lies at the end of the cell on the middle of the wing, and indeed over the whole wing-surface the dark scaling predominates; cilia greyish cinereous.

Hind wings very narrow, less than half the width of the fore wings;

with very long cilia; brownish grey; cilia greyish cinereous.

Abdomen greyish cinereous; anal tuft subochreous.

Legs: hind tibiæ fringed above; pale ochreous on their inner and under sides, greyish fuscous externally; hind tarsal joints faintly spotted with pale cinereous, a small pale ochreous spot above the first pair of spurs.

Exp. al. 11-12 millim.

Hab. West Indies—St. Vincent (Kingstown and windward side, 3 specimens, Smith).

Type, \mathcal{L} .

The genus Anybia is represented in Europe by a single species, with which I have very carefully compared the two now described; the neuration is undoubtedly similar and the very slight difference in the more recurved palpi is quite insufficient to separate them, especially as the comparative lengths of the joints with their closely appressed scales precisely agree with the type. It is remarkable that this genus should not have been recorded from other localities, since its presence in the West Indies indicates the probability of a wider distribution.

ANYBIA CURVIPUNCTELLA, sp. n.

[Antennæ wanting.]

Palpi recurved to base of antennæ, apical joint as long as the second; purplish fuscous.

Head purplish fuscous; face shining pale cinereous.

Thorax purplish fuscous.

Fore wings purplish fuscous, with a semicircular pale ochreous spot on the outer third of the fold, which runs through the middle of it, its concavity being towards the base; two minute very pale ochreous spots—one costal, the other dorsal—opposite to each other at about one fifth from the apex; cilia purplish fuscous at the apex, pale cinereous on the dorsal margin below it.

Hind wings very narrow; pale greyish; cilia pale cinereous with

a faint ochreous tinge.

Abdomen greyish cinereous.

Legs purplish fuscous externally, very pale ochreous internally; posterior tibiæ fringed above with very pale ochreous hairs; a pale ochreous spot at the base of the spurs and some pale ochreous spots on the posterior tarsal joints.

Exp. al. 8 millim.

Hab. West Indies—St. Vincent (windward side, 1 specimen, Smith).

Type, \mathfrak{D} .

A much smaller species than conspersa, and at once distinguished by the pale ochreous spot on the fold.

BATRACHEDRINÆ.

BATRACHEDRA, Stn.

BATRACHEDRA ALBISTRIGELLA, Mschl.

Batrachedra albistrigella, Mschl. Ab. Senck. Nat. Ges. xv. pp. 345, 354 (1890).

West Indies—Portorico (Mschl.).

ZARATHRA, Wkr.

ZARATHRA INSULELLA, sp. n.

Antennæ half as long again as the fore wings; basal joint very slightly enlarged; pale yellowish.

Maxillary palpi slightly folded.

Labial palpi very long, recurved, slender, acuminate; apical joint slightly longer than the second; white.

Head thickly clothed with appressed scales, projecting in front at

the sides of the face; shining whitish with an aureous tinge.

Thorax pale yellowish.

Fore wings shining pale straw-colour, with an aureous streak extending from the base along the middle and spreading over the costal margin beyond the middle of the wing, and crossing the fold towards the dorsal margin in two diffused spots, the first near the base, the other about the middle; immediately before the apex is a

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slender shining leaden-grey semicircular line bulging outwards from the costal and recurved to the dorsal margin about the anal angle; at the apex is a conspicuous black spot, from which a curved black line runs through the cilia towards the anal angle, but is ended abruptly before reaching it; between this and the semicircular shining line already mentioned is an oblique straight black line following the margin of the wing at the base of the cilia and reaching upwards nearly to the costo-apical spot; cilia tipped with black at the extreme apex, those on the hind margin pale reddish grey. Underside brownish fuscous.

Hind wings grey; cilia pale reddish grey.

Abdomen reddish grey.

Legs: hind tibiæ fringed above with separate pale yellowish hairs, giving a pectinate appearance; a black spot lies at the base of the spurs and three black bands on the tarsal joints, which are otherwise white.

Exp. al. 9 millim.

Hab. West Indies-St. Vincent (3 specimens, Smith).

Type, \mathcal{J} .

This species is closely allied to Gracilaria leuconota, Z., from Ubaque, which also probably belongs to this genus; the species now described differs chiefly in the larger dark apical spot, which is placed nearer to the costal margin, and in the presence of the oblique black streak below it. I am justified in separating it from the genus Gracilaria on account of its much longer antennæ and its slender long recurved palpi; the maxillary palpi, although undoubtedly present in the typical Zarathra, are not quite so strongly developed as in this species, but the shape of the wings is the same, and, so far as I can judge without denuding the specimen, the general pattern of neuration is similar. This genus is not confined to South America, but extends also to Africa and the Indian region.

GRACILARIANÆ.

GRACILARIA, Hw.

GRACILARIA ÆNEOCAPITELLA, sp. n.

Antennæ greyish, faintly spotted with paler colour.

Palpi whitish, outer half of second joint fuscous, except at the extreme apex.

Head shining iridescent bronze; face shining metallic whitish.

Thorax shining bronzy.

Fore wings tawny purplish, mixed with pale lemon-yellow beyond the basal fourth; a conspicuous broad pale lemon-yellow band extends from the basal third along the costal portion of the wing to the apex, its margin not clearly defined, the tawny purple blending into it from below; this band is widest and most conspicuous about its commencement, where it contains one or two minute fuscous costal dots; a series of dark purple striæ is also visible along the dorsal margin, and some small groups of fuscous scales are on the apical portion of the wing, reaching to the extreme apex; cilia at

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apex and beneath it pale yellowish sprinkled with fuscous, on the dorsal margin grey.

Hind wings grey, with cilia of the same colour. Abdomen grey; shining creamy white beneath.

Legs: anterior and median pair with bronzy-brown tibiæ and white tarsal joints; posterior pair shaded above with bronzy brown, tarsal joints whitish.

Exp. al. 12 millim.

Hab. West Indies—St. Vincent (windward side, 1 specimen, Smith).

Type, J.

GRACILARIA APICEPUNCTELLA, sp. n.

Antennæ with the basal joint slightly enlarged; longer than the

fore wings; very pale cinereous.

Palpi rather long, dependent, slender; second joint cinereous, with a darker spot on its outer side at the apex; apical joint about equal in length to the second, whitish, with a dark spot rather before the middle on its outer side.

Head very pale cinereous; face whitish.

Thorax dirty whitish.

Fore wings greyish fuscous, obliquely barred with interrupted creamy-white bands along the dorsal half of the wing; a round black apical spot enclosed in a pale ferruginous apical space, which is narrowly black-margined, its anterior margin straight, its posterior margin following the base of the cilia around the apex and apical margin to the anal angle; the creamy-white bands and markings are distributed as follows:—near the base a small square dorsal spot; beyond it before the middle a larger spot tending obliquely outwards towards a small subcostal spot before the middle, between which and the base is a second smaller subcostal spot; a narrow line from before the middle runs along the dorsal margin, and is dilated beyond the middle into a large trapezoidal dorsal patch, which reaches to the inner margin of the pale ferruginous apical space, and diverted to the costa by a narrow line internally and externally dark-margined, its external margin being the blackish inner margin of the ferruginous space already mentioned; before this narrow line are three short longitudinal streaks, the middle one almost or quite communicating with a short oblique subcostal streak beyond the middle, near the costal end of which another oblique separate streak arises, which tends backward towards the dorsal margin, terminating above the origin of the narrow dorso-marginal line before the middle of the wing-length; cilia pale greyish tipped with black, on the dorsal margin pale greyish.

Hind wings and cilia greyish.

[Abdomen missing.] Exp. al. 8 millim.

Hab. West Indies—St. Vincent (windward side, 1 specimen, Smith).

Type, \mathfrak{P} .

The following species do not belong to the families dealt with in this paper:—

Grapholitha? subapicana, Wkr. Cat. Lp. Ins. B. M. xxviii. pp. 387-8 (1863).

West Indies-San Domingo (Wkr.).

Galasa rubidana, Wkr. Cat. Lp. Ins. B. M. xxxv. p. 1802 (1866). West Indies—Jamaica (Wkr.).

Eggyna submutata, Wkr. Cat. Lp. Ins. B. M. xxxv. pp. 1895-6 (1866).

West Indies-San Domingo (Wkr.).

Cydosia nobilitella, Cram. Pap. Exot. iii. p. 128, pl. cclxiv. fig. G (1779).

South America, Central America. West Indies.

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xxxv. London, 1858-66.

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TABLE OF DISTRIBUTION.

	I A	ВL	E O	F .	וע	21	KI.	<u></u>	TI	UN	•
			W	Tes'	т I	NDI	ES.	•			
	Cuba.	Jamaica.	Haiti or San Domingo.	Portorico.	St. Thomas.	St. Martin.	Dominica.	St. Vincent.	Trinidad.	Curação.	Other Localities.
PTEROPHORIDÆ. AGDISTINÆ.											
1. Scoptonoma, Z. 1. tipuloides, Wlsm			•••	•••	• • •	•••	• • •		*		
2. Trichoptilus, Wism.								×			New Guinea, Australia,
2. centetes, <i>Meyr</i>						•••	• • •	×		• • •	(? Ceylon).
4. (? STENOPTILIA, Hb .)	• • •	• • •	•••	• • •	*	• • •	• • •	• • •	• • •	*	
5. pumilio, Z.) 5. Alucita, L. 6. thomæ, Z			• • •	• • •	*	• • •		*			United States.
7. basalis, <i>Mschl.</i>	• • •		•••	* * *	• • •	• • •	• • •				United States.
11. præustus, Mschl 6. Pterophorus, Geoffr. 12. agraphodactylus, Wkr.			*	*							
13. aspilodactylus, Wkr 14. sp., Mschl		*	•••	*							
ORNEODINÆ. 7. Orneodes, Latr. 15. eudactyla, F. & R			•••	*				• • •		• • •	Colombia, Brazil.

TABLE (continued).

			,	WES	тІ	NDI	ES.				
	Cuba.	Jamaica.	Haiti or San	Portorico.	St. Thomas.	St. Martin.	Dominica.	St. Vincent.	Trinidad.	Curação.	Other Localities.
TORTRICIDÆ. TORTRICINÆ. 8. Apinoglossa, Mschl. & Saalm.											
16. comburana, Mschl 9. Cacœcia, Hb. 17. jamaicana, Wkr 10. (Tortrix, L.). 18. effoetana, Mschl 19. insignitana, Mschl 11. Ptychamorbia, Wlsm. 20. catenana, Wlsm. 21. rostrana, Wkr 21. rostrana, Wkr 22. repandana, Wkr 13. Ceratorrhineta, Z. 23. calidana, Z		*	*	*							Brazil. Florida, Venezuola, Brazil.
CONCHYLIDINÆ. 14. CONCHYLIS, Tr. 24. lacteipalpis, Wlsm. 25. prolectana, Mschl. 26. tectonica, Mschl. 27. vicinitana, Mschl. 28. bunteana, Robs. 29. sp., Wlsm. 30. sp., Wlsm.	•••	•••	• • •	* *		•••	• • •	*		• • •	United States.
15. Bactra, Stph. 31. lanceolana, Hb 16. Episimus, Wlsm. transferrana, Wkr. 32. var. vincentana, Wlsm. 33. augmentana, Z		• • •	• • •				• • •				Europe, Africa, Asia, Australia, New Zeaiand, United States. Brazil.
17. CACOCHARIS, Wlsm. 34. albimacula, Wlsm 18. Phoxopteris, Tr. 35. virididorsana, Mschl. 19. Grapholitha, HS. 36. livens, Wlsm 37. excitana, Mschl			• • •	*							

Proc. Zool. Soc.—1891, No. XXXVII.

			,	Wı	EST	r I	NDI	ES.				
	Cuba.	Jamaica.	Haiti or San	Domingo.	Portorico.	St. Thomas.	St. Martin.	Dominica.	St. Vincent.	Trinidad.	Curação.	Other Localities.
GRAPHOLITHINÆ (continued). 20. (? Coptoloma, Ld.) 38. figurana, Z.						*						
39. albicapitana, Wlsm 21. Pædisca, Tr. 40. longipalpana, Mschl 22. Crocidosema, Z.			••	•	*							The state of the s
23. Strepsicrates, Meyr. 42. smithiana, Wlsm. 24. Heligmotera, Wlsm. 43. calvifrons, Wlsm.	• • •		••	•	• • •		• • •		*	•••	• •	Europe, Australia, Brazil, Peru, Argentine Republic.
TINEIDÆ. TINEINÆ. 25 TINEA, L. 44. plumella, Wlsm:		• • •		•		• • •		• • •	*			
45. sp., Wlsm		*										
SETOMORPHINE. 27. Setomorpha, Z. 48. rupicella, Z.												
ANAPHORINÆ. 28. EULEPISTE, Wlsm. 49. umbratipalpis, Wlsm 29. Acrolophus, Poey.												
50. vitellus, Poey	. * . *			••	*					-		
55. leucodocis, Z 30. Cænogenes, Wlsm. 56. pusitla, Z 57. ochracea, Mschl	. , .			.:								

TABLE (continued).

	WEST INDIES.											
	Cuba.	Jamaica.	Haiti or San	Domingo.	Portorico.	St. Thomas.	St. Martin.	Dominica.	St. Vincent.	Trinidad.	Curação.	Other Localities.
ANAPHORINÆ (continued). 31. ANAPHORA, Clem. 58. popeanella, Mschl 59. arcasalis, Wkr 60. mimasalis, Wkr 61. noctuina, Wlsm 32. Felderia, Wlsm. 62. dimidiella, Wlsm	*		六		*							United States.
33. BAZIRA, Wkr. 63. xylinella, Wkr. EUPLOCAMINÆ. 34. AMYDRIA, Clem. 64. anaphorella, Wlsm									*			
35. Myrmecozela, Z. 65. ochraceella, Tengstr 36. Tiquadra, Wkr. 66. aspera, Z	• • •		• •	•	*	• • •						Europe.
67. lentiginosa, Z	> 0 0	• • •	• •	•		• • •	• • •	*		*		Drazii, 1 eru.
PLUTELLINÆ. 38. PLUTELLA, Schrk. 70. cruciferarum, Z	•••	• • •	• •		*			• • •	• •		• • •	Europe, Asia, Africa, North America, South America, Australia.
39. Gelechia, Z. 71. donatella, Wkr	• • •	*	*		*							
75. costipunctella, Mschl		• • •	• • •			• •	• • •		• • •		*	
80. translucida, Wlsm 81. sp., Wlsm												37 ♥

			V	VES	ST]		IES				
	Cuba.	Jamaica.	Haiti or San Domingo.	Portorico.	St. Thomas.	St. Martin.	Dominica.	St. Vincent.	Trinidad.	Curação.	Other Localities.
GELECHIANÆ (continued). 41. Lita, Tr.											
82. crocipunctella, Wlsm 42. Pœcilia, Hein. 83. extranea, Wlsm					•••	•••	• • •	*			
43. DIDACTYLOTA, Wlsm. 84. bicolor, Wlsm					• • •		• • •				
44. TACHYPTILIA, Hein. 85. desectella, Z	*										
86. obseratella, Z			• • •			• • •	• • •	*			
47. Brachycrossata, Hein. 88. psoricopterella, Wlsm. 48. Diastoma, Mschl.					•	• • •	• • •	*			
89. squamosa, Wlsm 49. Polyhymno, Chamb. 90. godmani, Wlsm		- 1									
50. Ypsolophus, Z. 91. manellus, Mschl 92. rusticus, Wlsm		•••	•••	*							United States.
93. piperatus, <i>Wlsm.</i> 94. indignus, <i>Wlsm.</i>		• • •					• • •	*			
ŒCOPHORINÆ. 51. Psecadia, Hb.											
95. confusella, <i>Wkr.</i> 96. ingricella, <i>Mschl.</i> 97. paucella, <i>Wkr.</i>		*	*	*	• • •	• • •	*	• • •	• • •	• • •	Colombia.
98. notatella, Wkr		*	*	*			• • •	• • •	•••	*	
101. exornata, Z	*	*					• • •	• • •		• • •	Peru.
104. nivosella, Wkr	•••	*	*								
52. Tortyra, Wkr. 105. auriferalis, Wkr. 53. Gauris, Hb.				*	• • •	*	• • •	*			
106. biferana, Wkr	*		*	• • •	*						

			V	Ves	тΙ	N D I	ES.				
	Cuba.	Jamaica.	Haiti or San Domingo.	Portorico.	St. Thomas.	St. Martin.	Dominica.	St. Vincent.	Trinidad.	Curação.	Other Localities.
CHOREUTINÆ. 54. Brenthia, Clem. 108. pavonacella, Clem	• • •	• • •	• • •	*			• • •	•••	• • •	•••	United States, Central America, Brazil.
GLYPHIPTERYGINÆ. 55. Trapeziophora, Wlsm. 109. gemmula, Wlsm	• • •	•••	•••		•••	•••	• • •	*			
XYLORYCTINÆ. 56. GLYPHIDOCERA, Wlsm. 110. audax, Wlsm	• • •		•••			•••	• • •	*			
HYPONOMEUTINE. 57. HYPONOMEUTA, Z. 111. mahalebellus, Gn 112. triangularis, Mschl 58. Œta, Grt. 113. punctella, Cram	• • •	• • •	•••	*							Europe. United States, Honduras,
114. fulviguttella, Z	*	*	•••								Surinam, French Guiana, Brazil, Argentine Republic. (? Australia, Z.)
59. Euarne, Mschl. & Saalm. 117. obligatella, Mschl 60. Trichostibas, Z. 118. calligera, Z. 119. ovata, Z. 120. sordidata, Z. 121. ? iophlebia, Z.	* *		•••	*			• • •		•••		Antilles $(Z.)$.
BUTALINÆ. 61. Auximobasis, Wlsm. 122. persimilella, Wlsm					0 - 0	• • •	• • •	*			
HELIODININÆ. 62. Heliodines, Stn. 123. marginata, Wlsm			•••				•••	*			[57]

				W	ES'	r I	ND	ŒS,	•			
	Cuba.	Jamaica.	Haiti or San	Domingo.	Portorico.	St. Thomas.	St. Martin.	Dominica.	St. Vincent.	Trinidad.	Curação.	Other Localities.
COSMOPTERYGINÆ.												
63. Cosmopteryx, Hb. 124. lespedezæ, Wlsm 125. (? gemmiferella, Clem.) Mschl. 126. sancti-vincentii, Wlsm LAVERNINÆ.		• • •	• •		*	•••	• • •	• • •	*		• • •	United States. United States.
64. Anybia, Stn. 127. conspersa, Wism 128. curvipunctella, Wilsm.				- 1	• • •	•••	• • •	0 0 0	*			
BATRACHEDRINÆ. 65. BATRACHEDRA, Stn. 129. albistrigella, Mschl 66. ZARATHRA, Wkr. 130. insulsella, Wlsm					*	• • •	• • •	• • •	*			
GRACILARIANÆ. 67. GRACILARIA, Hw. 131. æneocapitella, Wlsm 132. apicepunctella, Wlsm	• • •	• • •	••	•					*			

EXPLANATION OF PLATE XLI.

Fig. * 1. Ptychamorbia exustana, $\beta \subsetneq$, p. 497.

a, Neuration, φ ; b, neuration of fore wing, β ; c, head, β ;

d, head, φ ; e, f, antenna, β .

* 2. Ceratorrhineta calidana, $\beta \subsetneq$, p. 499.

a, Neuration, β ; b, neuration of fore wing, φ ; c, head, β ;

d, head, φ ; e, antenna, β .

3. Episimus transferrana, β , p. 501.

a, Neuration; b, head.

*4. Cacocharis albimacula, Q, p. 503. a, Neuration; b, head.

*5. Heligmocera calvifrons, &, p. 507.

a, Neuration; b, c, head; d, antenna.

*6. Dendroneura præstans, & \(\begin{aligned} \begin{aligned} \beta \end{aligned}, p. 509. \end{aligned}

a. Neuration, \mathcal{J} ; b. head, \mathcal{J} ; c. head, \mathcal{I} .

*7. Transziophora gemmula, 3, p. 530. a, Neuration; b, head.

*8. Glyphidocera audax, J, p. 531. a, Neuration; b, head; c, antenna.

*9. Auaimobasis persimilella, 3, p. 534.
a, Neuration; b, head; c, antenna.

Fig. * 10. Eulepiste umbratipalpis, &, p. 511. Genital segments.

11. Acrolophus vitellus, &, p. 512. Genital segments.

* 12. — poeyi, &, p. 512. Genital segments.

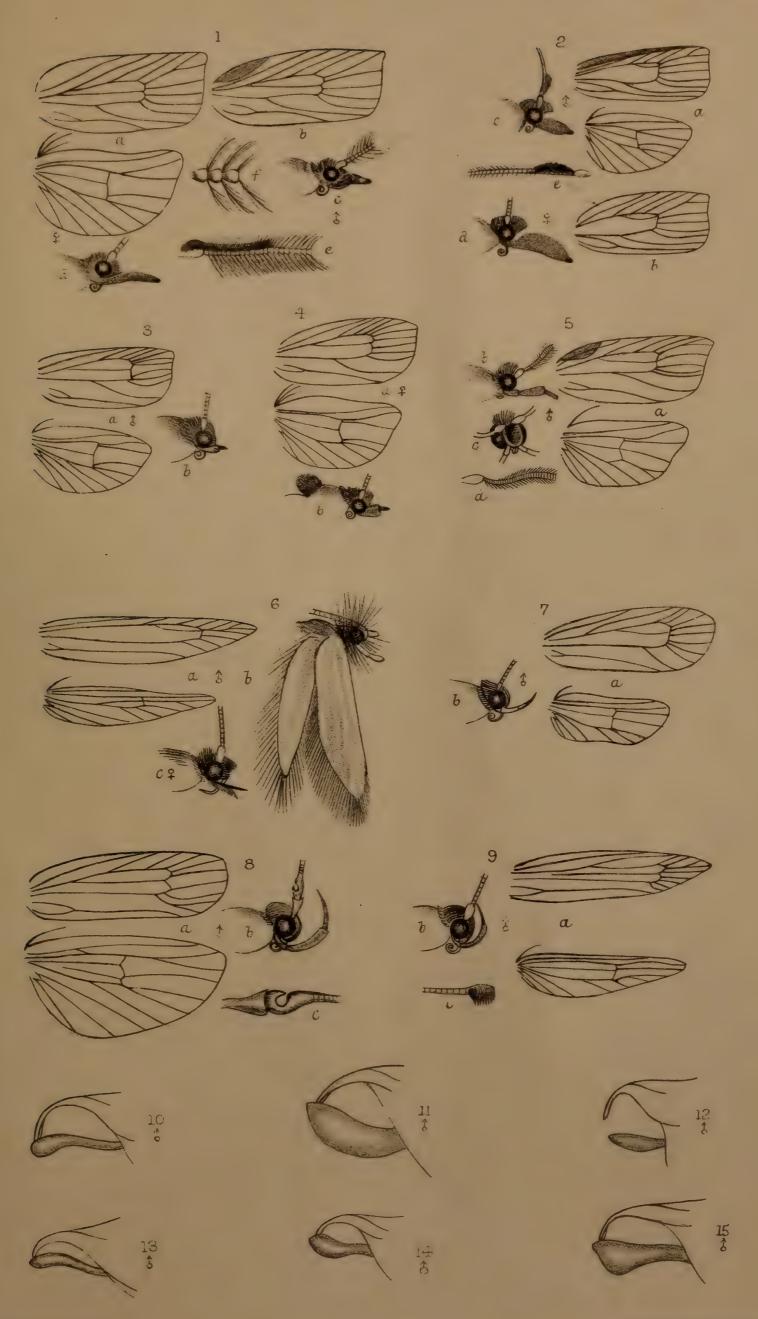
13. — walsinghami, &, p. 514. Genital segments.

* 14. Anaphora noctuina, &, p. 515. Genital segments.

* 15. Felderia dimidiella, &, p. 516. Genital segments.

* = Drawn from the type. The figures are all enlarged.



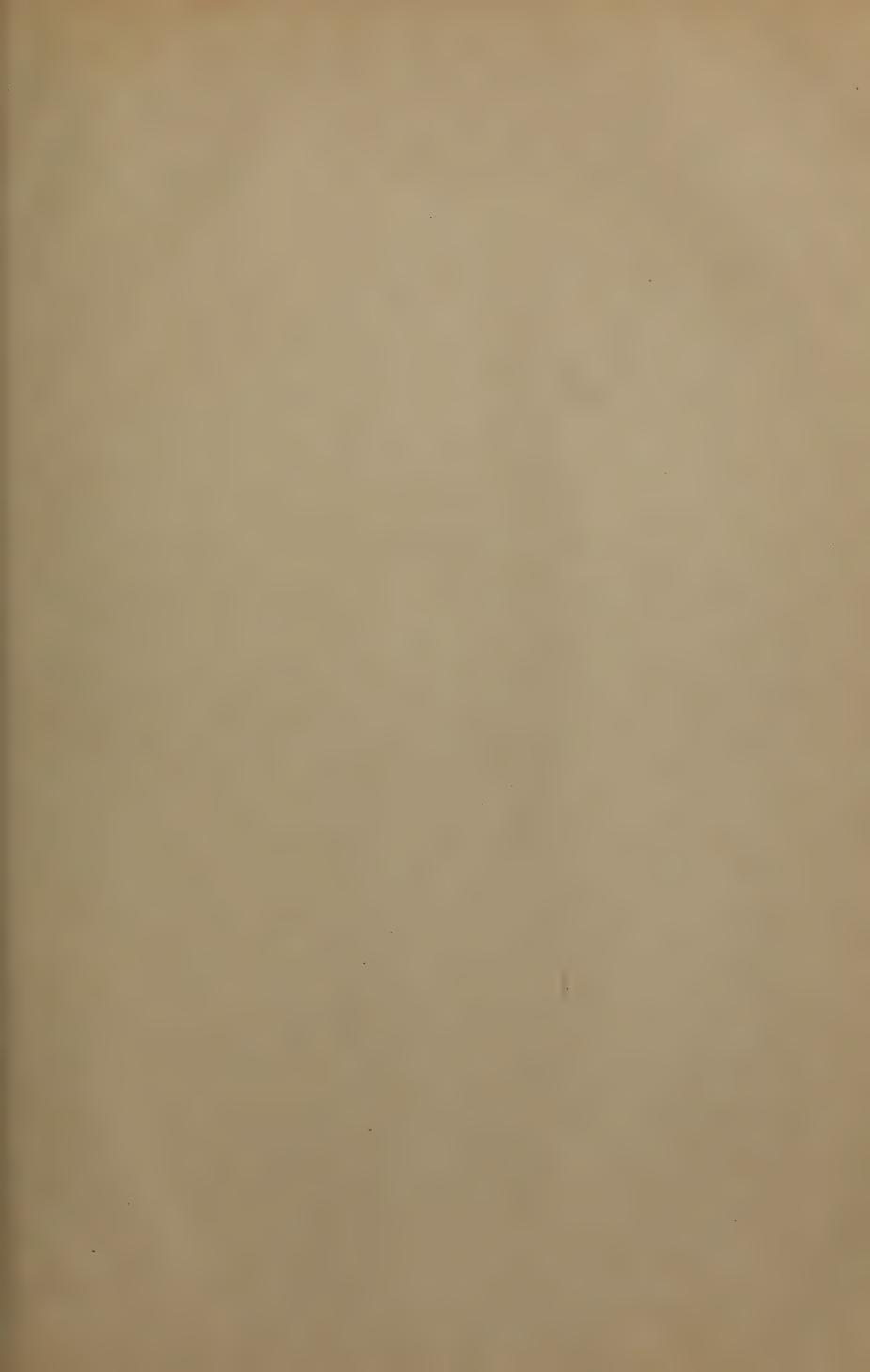


J.H.Durrant del. F.W.Frohawk lith.

West, Newman imp.

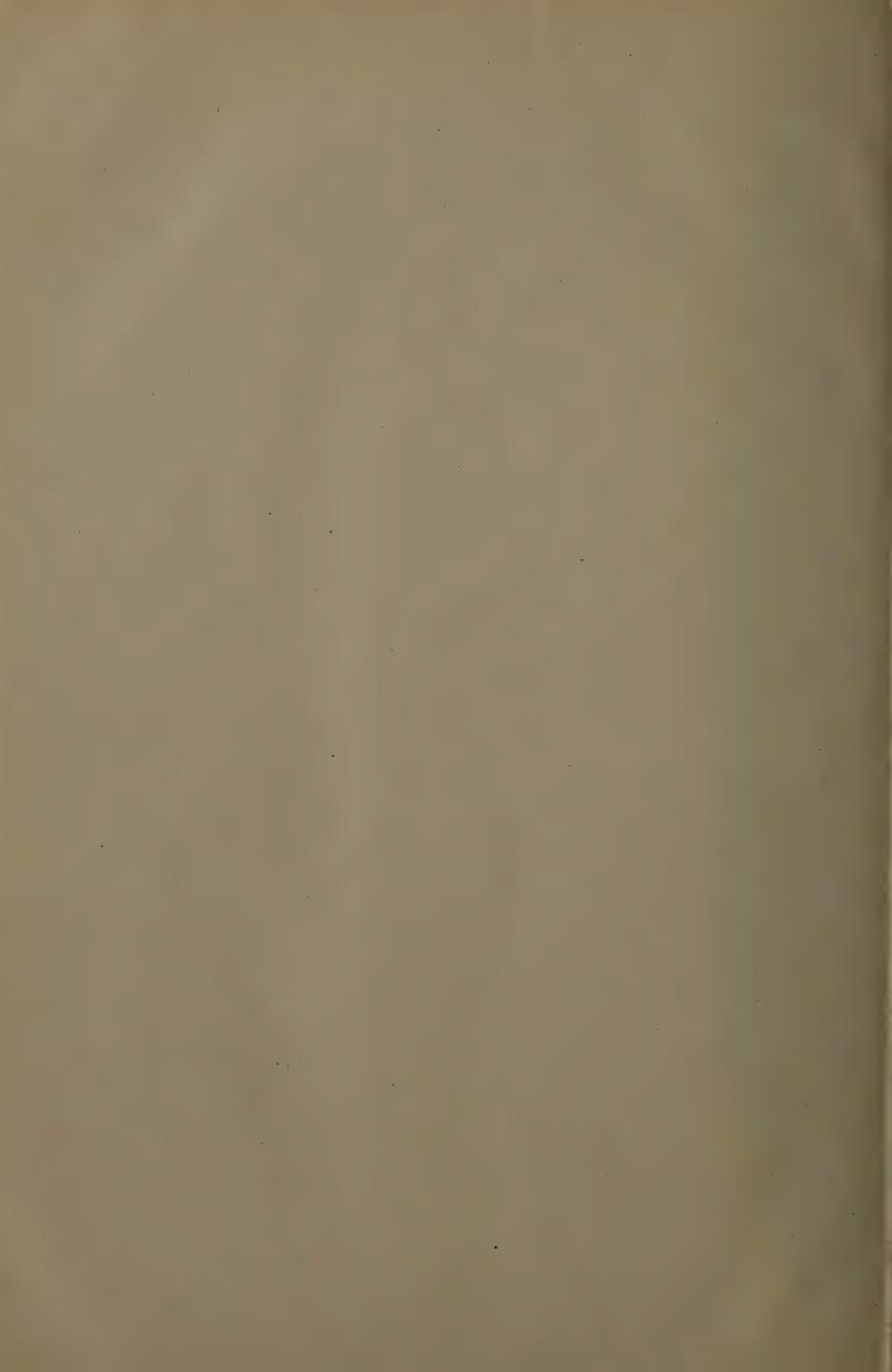
Caltrance

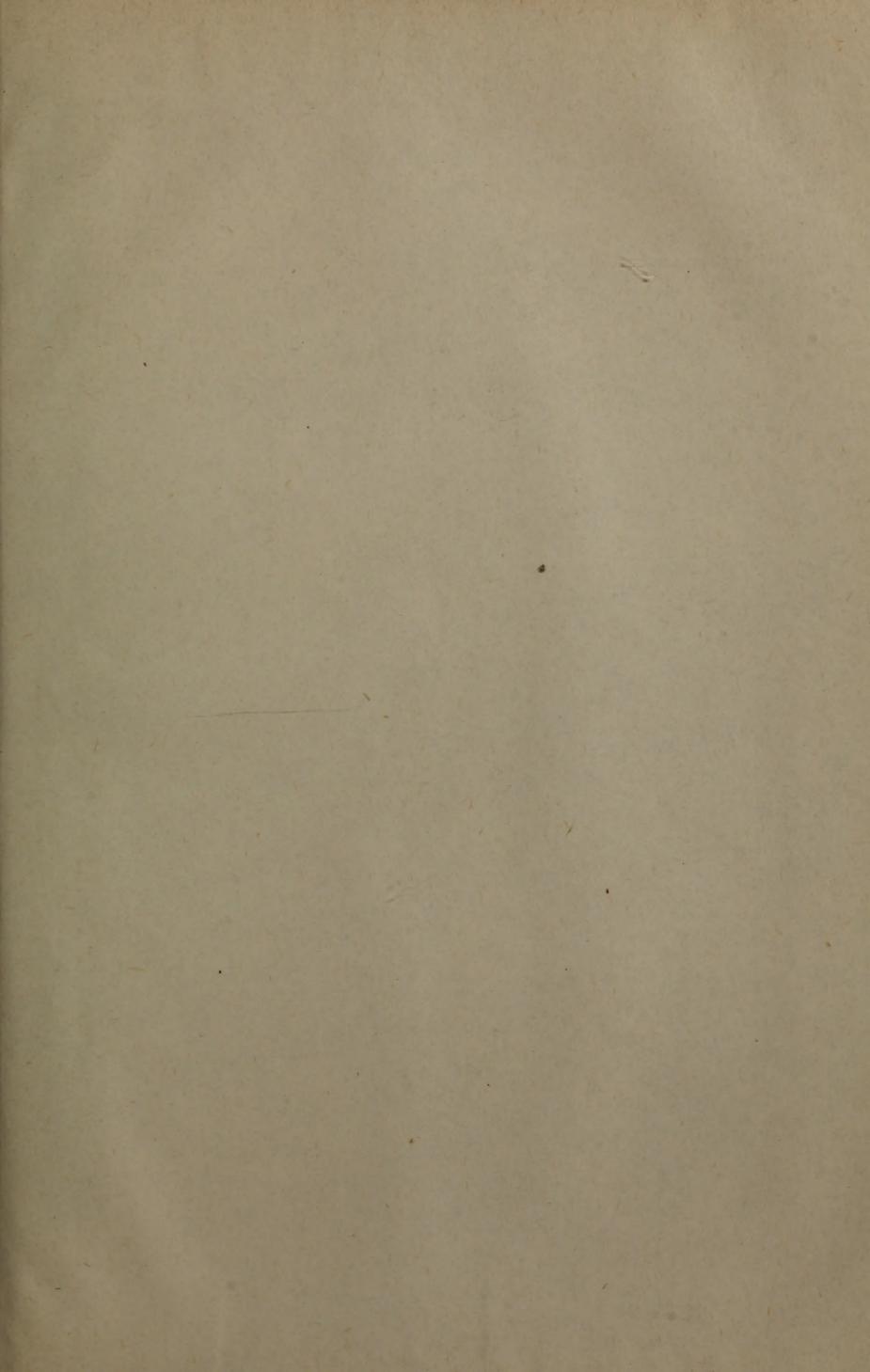
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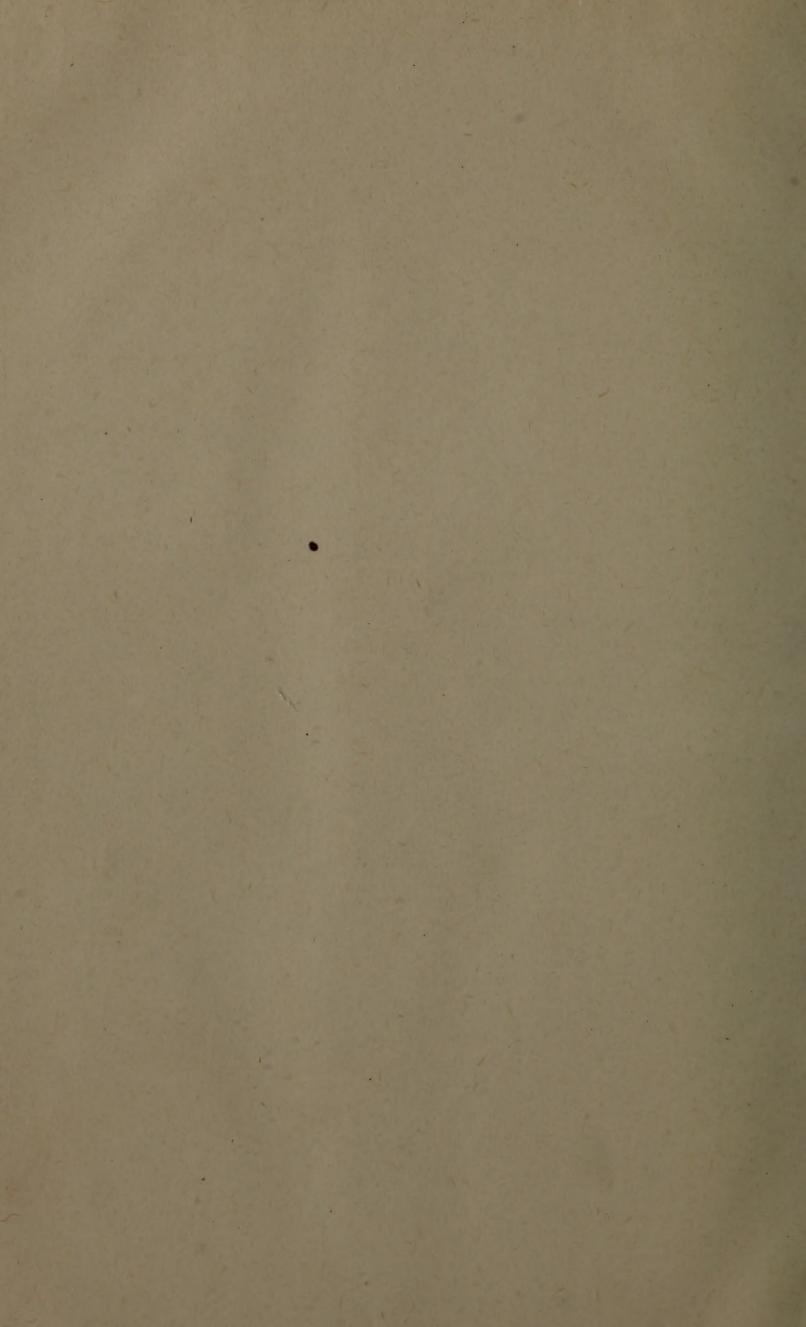


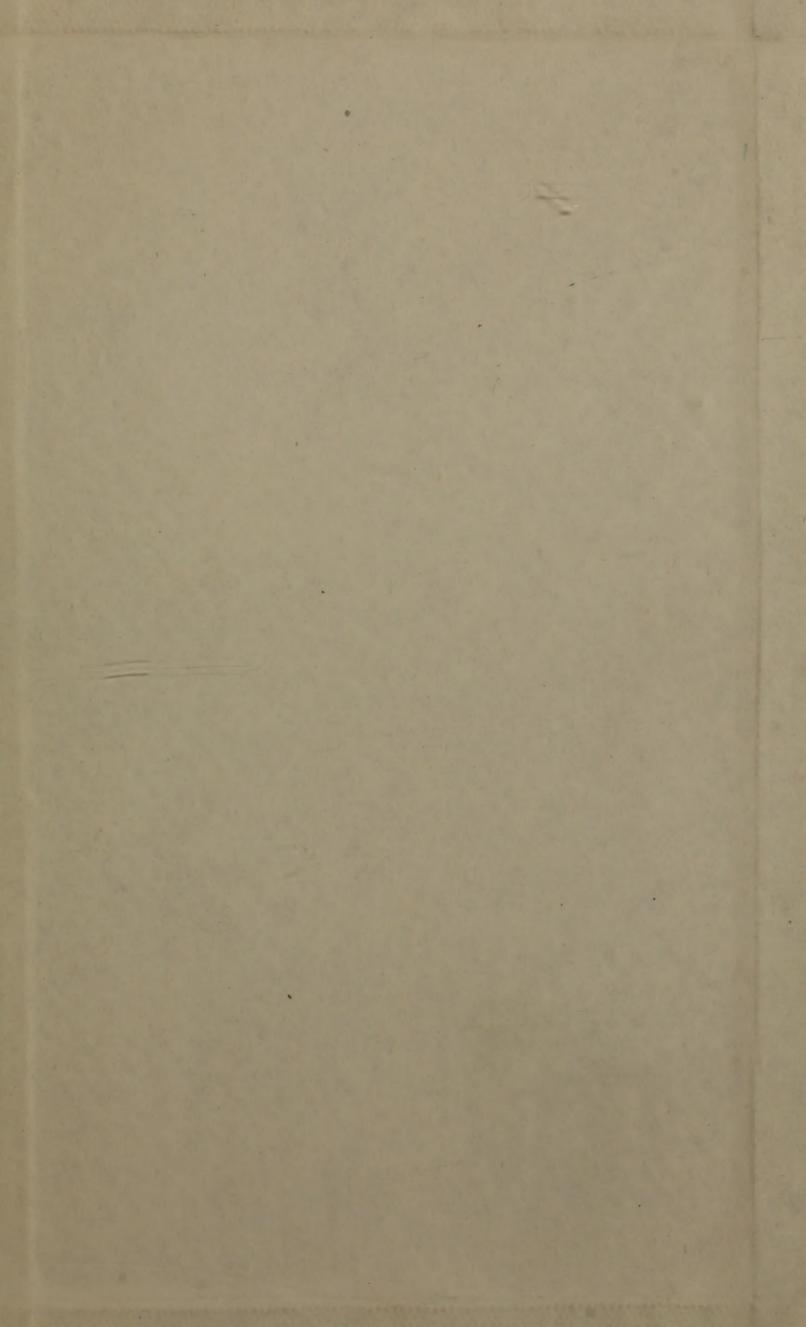












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